

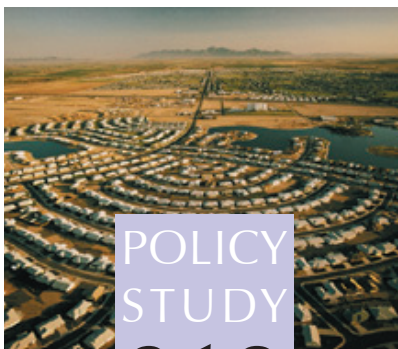
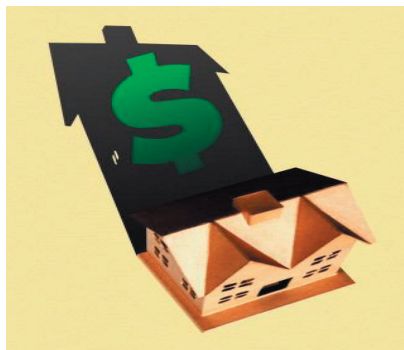


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HOUSING SUPPLY AND AFFORDABILITY: DO AFFORDABLE HOUSING MANDATES WORK?

By Benjamin Powell, Ph.D and Edward Stringham, Ph.D
Project Director: Adrian T. Moore, Ph.D



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Housing Supply and Affordability: Do Affordable Housing Mandates Work?

By Benjamin Powell, Ph.D. and Edward Stringham, Ph.D
Project Director: Adrian T. Moore, Ph.D

Executive Summary

California and many urban areas nationwide face a housing affordability crisis. New housing production has chronically failed to meet housing needs, causing housing prices to escalate. Faced with demands to “do something” about the housing affordability crisis, many local governments have turned to “inclusionary zoning” ordinances in which they mandate that developers sell a certain percentage of the homes they build at below-market prices to make them affordable for people with lower incomes.

The number of cities with affordable housing mandates has grown rapidly, to about 10 percent of cities over 100,000 population as of the mid-90s, and many advocacy groups predict the trend will accelerate in the next five years. California was an early leader in the adoption of inclusionary zoning, and its use there has grown rapidly. Between 1990 and 2003, the number of California communities with inclusionary zoning more than tripled—from 29 to 107 communities—meaning about 20 percent of California communities now have inclusionary zoning.

Inclusionary zoning attempts to deal with high housing costs by imposing price controls on a percentage of new homes. During the past 20 years, a number of publications have debated the merits of inclusionary zoning programs. Nevertheless, as a recent report observed, “These debates, though fierce, remain largely theoretical due to the lack of empirical research.”

This study attempts to fill the research void. In this paper we use data from communities in the San Francisco Bay Area region to evaluate the effects of inclusionary zoning and examine whether it is an effective public policy response to high housing prices. We chose the Bay Area because inclusionary zoning is particularly prevalent there; today more than 50 jurisdictions in the region have inclusionary zoning. These communities have various sizes and densities with different income levels and demographics, so they provide a good sample to tell us how inclusionary zoning is probably working nationwide.

These are our findings:

Inclusionary Zoning Produces Few Units

Since its inception, inclusionary zoning has resulted in few affordable units. The 50 Bay Area cities with inclusionary zoning have produced fewer than 7,000 affordable units. The average since 1973 is only 228 units per year. After passing an ordinance, the average city produces fewer than 15 affordable units per year.

Inclusionary zoning cannot meet the area's affordable housing needs. At current rates, inclusionary zoning will only produce 4 percent of the Association of Bay Area Governments' estimated affordable housing need. This means inclusionary zoning will require 100 years to meet the current five-year housing need.

Inclusionary Zoning Has High Costs

Inclusionary zoning imposes large burdens on the housing market. For example, if a home could be sold for \$500,000 dollars but must be sold for \$200,000, the revenue from the sale is \$300,000 less. In half the Bay Area jurisdictions this cost associated with selling each inclusionary unit exceeds \$346,000. In one fourth of the jurisdictions the cost is greater than \$500,000 per unit, and the cost of inclusionary zoning in the average jurisdiction is \$45 million, bringing the total cost for all inclusionary units in the Bay Area to date to \$2.2 billion.

Inclusionary Zoning Makes Market-priced Homes More Expensive

Who bears the costs of inclusionary zoning? The effective tax of inclusionary zoning will be borne by some combination of market-rate homebuyers, landowners, and builders. How much of the burden is borne by market-rate buyers versus landowners and builders is determined by each group's relative responsiveness to price changes.

We estimate that inclusionary zoning causes the price of new homes in the median¹ city to increase by \$22,000 to \$44,000. In high market-rate cities such as Cupertino, Los Altos, Palo Alto, Portola Valley, and Tiburon we estimate that inclusionary zoning adds more than \$100,000 to the price of each new home.

Inclusionary Zoning Restricts the Supply of New Homes

Inclusionary zoning drives away builders, makes landowners supply less land for residential use, and leads to less housing for homebuyers—the very problem it was instituted to address.

In the 45 cities where data is available, we find that new housing production drastically decreases the year after cities adopt inclusionary zoning. The average city produced 214 units the year before inclusionary zoning but only 147 units the year after. Thus, new construction decreases by 31 percent the year following the adoption of inclusionary zoning.

In the 33 cities with data for seven years prior and seven years following inclusionary zoning, 10,662 fewer homes were produced during the seven years after the adoption of inclusionary zoning. By artificially lowering the value of homes in those 33 cities, \$6.5 billion worth of housing was essentially destroyed.

Considering that over 30 years inclusionary zoning has only yielded 6,836 affordable units, one must question whether those units are worth the cost in terms of fewer and higher-priced homes.

Inclusionary Zoning Costs Government Revenue

Price controls on new development lower assessed values, thereby costing state and local governments lost tax revenue each year. Because inclusionary zoning restricts resale values for a number of years, the loss in annual tax revenue can become substantial. The total present value of lost government revenue due to Bay Area inclusionary zoning ordinances is upwards of \$553 million.

Price Controls Do Not Address the Cause of the Affordability Problem

Price controls fail to get to the root of the affordable housing problem. Indeed by causing fewer homes to be built they actually make things worse. The real problem is government restrictions on supply. From 1990 through 2000, the Bay Area added nearly 550,000 jobs but only about 200,000 new homes. The California Department of Finance recommends 1.5 new jobs per new home—the Bay Area produced only 55 percent of the suggested amount of housing.

Supply has not kept up with demand due to artificial restrictions. One recent study found that 90 percent of the difference between physical construction costs and the market price of new homes can be attributed to land use regulation.

The solution is to allow more construction. When the supply of homes increases, existing homeowners often upgrade to the newly constructed homes. This frees up their prior homes for other families with lower income. Inclusionary zoning restricts this upgrade process by slowing or eliminating new construction. With fewer new homes available, middle- and upper-income families bid up the price of the existing stock of homes, thus making housing less affordable for everyone.

Conclusion

Inclusionary zoning has failed to produce a significant number of affordable homes due to the incentives created by the price controls. Even the few inclusionary zoning units produced have cost builders, homeowners, and governments greatly. By restricting the supply of new homes and driving up the price of both newly constructed market-rate homes and the existing stock of homes, inclusionary zoning makes housing less affordable.

Inclusionary ordinances will continue to make housing less affordable by restricting the supply of new homes. If more affordable housing is the goal, governments should pursue policies that encourage the production of new housing. Ending the price controls of inclusionary zoning would be a good start.

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Part I

Introduction

The number of cities with affordable housing mandates has grown rapidly, to about 10 percent of cities over 100,000 population as of the mid-90s, and many advocacy groups predict the trend will accelerate in the next five years.² California was an early leader in the adoption of inclusionary zoning, and its use there has grown rapidly. Between 1990 and 2003, the number of California communities with inclusionary zoning more than tripled—from 29 to 107 communities—meaning about 20 percent of California communities now have inclusionary zoning.³

A large concentration of cities with inclusionary zoning laws is in the San Francisco Bay Area, which also consistently rates as the country's least affordable region for housing. The median home price in the area is upwards of \$560,000 and prices for new housing are even higher.⁴ Such high prices affect all but the wealthiest families' chances of owning a home. Of metropolitan areas with more than one million residents, San Francisco, San José and Oakland respectively rank 1, 2, and 4 as the least affordable areas in the nation (Table 1).

Metro Area	Least Affordable Metropolitan Areas	Share of Homes Affordable for Median Incomes	Family Income
San Francisco, CA PMSA*	1	9.2%	\$86,100
San José, CA PMSA	2	20.1%	\$96,000
San Diego, CA MSA	3	21.6%	\$60,100
Oakland, CA PMSA	4	23.9%	\$74,500
Los Angeles-Long Beach, CA PMSA	5	34.4%	\$55,100
Orange County, CA PMSA	6	37.7%	\$75,600
Sacramento, CA PMSA	7	43.7%	\$57,300
Portland-Vancouver, OR-WA PMSA	8	46.6%	\$57,200
Boston, MA-NH PMSA	9	48.2%	\$74,200
Riverside-San Bernardino, CA PMSA	10	49.6%	\$50,300
New York, NY PMSA	11	49.9%	\$62,800
Miami, FL PMSA	12	58.1%	\$48,200
Denver, CO PMSA	13	59.6%	\$69,900
Bergen-Passaic, NJ PMSA	14	61.5%	\$78,900
Newark, NJ PMSA	15	61.1%	\$78,700

Source: Data are from the "Housing Opportunity Index: First Quarter 2002" (Washington, D.C.: National Association of Homebuilders), *PMSA and MSA are census designations meaning, respectively, Primary Municipal Statistical Area and Municipal Statistical Area.

Faced with demands to “do something” about the region’s housing affordability crisis, many local governments in the Bay Area have turned to inclusionary zoning ordinances. In response to the crisis, the number of Bay Area jurisdictions with inclusionary zoning has proliferated from just a handful in the early 1970s to more than 50 in 2004.

Inclusionary zoning is a name for artificially lowering the price, and therefore the value, on a percentage of new homes. Builders and subsequent owners are forced to sell the homes so that they are “affordable” to specific income levels.

The price controls are set using different formulas so that the “inclusionary” units will be affordable to either “Very Low,” “Low,” or “Moderate” income households, or some combination thereof. “Very Low” income is most often classified as up to 50 percent of county median income, “Low” as 50-80 percent of median, and “moderate” as 80-120 percent of median. The percent of units targeted as inclusionary units varies by jurisdiction, ranging from 5 to 25 percent of the new homes constructed in a project. Typically, the inclusionary units must be constructed within the project and be of the same size and quality as the market-rate units. Some jurisdictions exempt small developments while others require builders to pay an in-lieu fee for developments of 10 homes or fewer to get out from under the price controls. Still others allow in-lieu fees for projects of all sizes. Ostensibly, some jurisdictions also offer incentives for compliance. These can take the form of “density bonuses” (giving builders the option to increase the density of their developments in return for making more of the units affordable), fast-track permitting (speeding up the process of issuing permits for new development), fee waivers, or exemptions from growth controls. In a few voluntary inclusionary programs, incentives are offered in exchange for a builder committing to sell at the price-controlled rates. But most inclusionary zoning programs are mandatory, requiring all builders to participate.

The proliferation of inclusionary zoning raises important public policy questions:

- Is it effective—does inclusionary zoning lead to a substantial increase in affordable housing production?
- Is it efficient—how do inclusionary zoning’s costs compare to its benefits?
- Is it equitable—does inclusionary zoning fairly apportion the cost of providing affordable housing?

These questions have not been adequately addressed. During the past 20 years a number of publications have debated the merits of inclusionary zoning programs. Nevertheless, as the 2003 report *Inclusionary Housing in California: 30 Years of Innovation* observed, “These debates, though fierce, remain largely theoretical due to the lack of empirical research.”⁵ Without knowing the economic and other real-world consequences of inclusionary zoning, policymakers have difficulty assessing the merits or faults of inclusionary zoning.

This study attempts to fill the research void. In this paper we use data from communities in the San Francisco Bay Area region to evaluate the effects of inclusionary zoning and examine whether it is an effective public policy response to high housing prices. We chose the Bay Area because inclusionary zoning is particularly prevalent there; today more than 50 jurisdictions in the region have inclusionary zoning. We include in our analysis the 182 cities, towns, and Census-defined places⁶ in the nine Bay Area counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. These communities are various sizes and densities with different income levels and demographics, so they provide a good sample to tell us how inclusionary zoning is probably working nationwide.

Part 2

The Housing Market and Inclusionary Zoning in the Bay Area

A number of studies document high housing prices and the affordability crisis in the Bay Area.⁷ Offering a temperate climate, cultural and natural resources, and job growth, the Bay Area has become an increasingly desirable place to live. From 1990 through 2000 the region added 547,590 jobs, an increase of 17 percent.⁸ The California Department of Finance recommends “1.5 jobs per new housing unit is a healthy jobs/housing balance,”⁹ which means more than 365,000 new homes should have been built. Yet the region added only 200,028 new homes—55 percent of the recommended need. Not surprisingly, housing prices have soared from their already high levels, as production has not kept pace with population and job growth. The percentage of homes affordable to a family earning median income is only 23.9 percent for Oakland Metro, only 20.1 percent for San José Metro, and an astonishingly low 9.2 percent for San Francisco Metro.¹⁰ Families earning less than median income have even fewer homes available in their price range.

In response to the affordable housing crisis, a number of local governments in the Bay Area have adopted inclusionary zoning requirements (Figure 1). While Palo Alto blazed the trail with its ordinance in 1973, most governments have adopted them in the past 10 years. Remaining cities now face loud calls from planners and advocacy groups to adopt inclusionary zoning as well. As of 2004, more than 50 Bay Area cities have some form of inclusionary zoning.¹¹

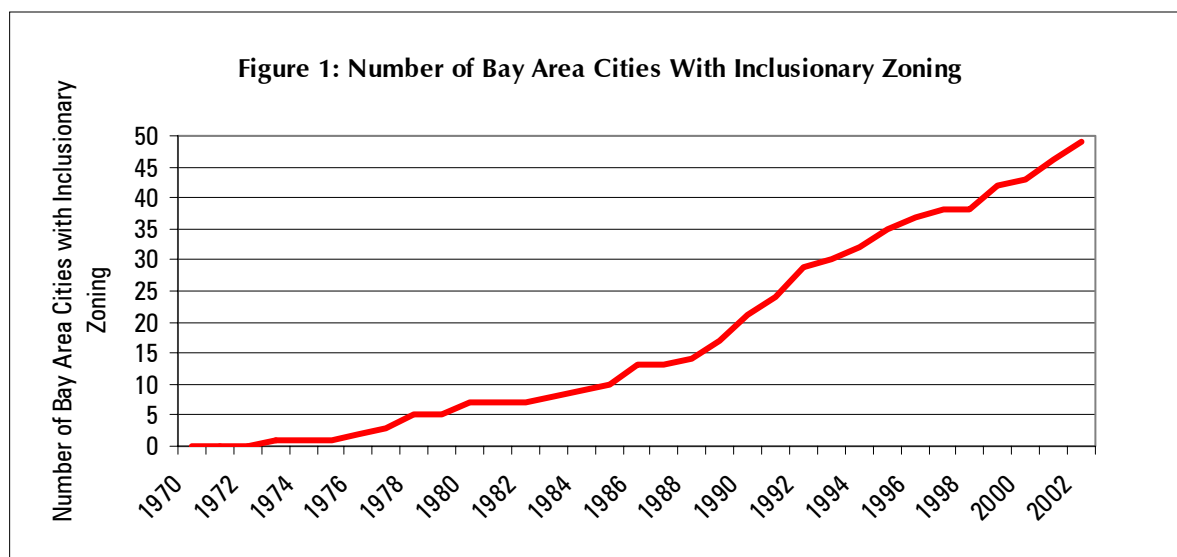


Table 2 shows the jurisdictional requirements and the number of price-controlled units produced by city. A number of communities could not report how many affordable units had been produced under the program, in most cases probably because the law was new or the community is very small and as yet there are no results. In some cases, though, it appears to be a simple unwillingness by city officials to keep track of how effective the policy is in spite of its costs. Our calculations of averages and costs exclude these cities.

Table 2 Bay Area Cities With Inclusionary Zoning					
City	Year imposed	Percent of new units under price controls	Target levels VL=Very Low; L=Low; M=Moderate	Number of price-controlled units produced by program	Average number of price-controlled units produced per year since program inception
Benicia	2000	10%	VL, L	*	*
Berkeley	1986	20%	VL, L, M	75	4.4
Brentwood	2003	10%	VL, L	*	*
Calistoga	1990	20%	L, M	78	6.0
Clayton	1995	10%	VL, L	84	10.5
Corte Madera	1989	10%	M	43	3.1
Cotati	1985	15%	M	*	*
Cupertino	1983	15%	VL, L, M	160	8.0
Danville	1999	10-15%	M	70	17.5
Dublin	1996	12.5%	VL, L, M	59	8.4
East Palo Alto	1994	20%	VL, L, M	115	12.8
Emeryville	1990	20%	M	463	35.6
Fairfax	1986	10-15%	L, M	*	*
Fremont	2002	15%	VL, L, M	*	*
Half Moon Bay	1996	20%	VL, L, M	12	1.7
Healdsburg	1993	15%	L, M	*	0.0
Hercules	1997	10%	M	*	0.0
Larkspur	1990	10-15%	L, M	85	6.5
Livermore	1978	10%	L	217	8.7
Los Altos	1990	10-20%	VL, L	50	3.8
Los Gatos	1976	10%	M	*	*
Menlo Park	1986	10-15%	L, M	28	1.6
Mill Valley	1988	10-15%	VL, L, M	319	21.3
Morgan Hill	1977	10%	L, M	302	11.6
Mountain View	1999	10%	L, M	*	*
Napa	1999	10%	VL, L, M	56	14.0
Novato	1999	10-15%	L	40	10.0
Palo Alto	1973	15-20%	L, M	274	9.1
Petaluma	1984	15%	L, M	1442	75.9
Pleasant Hill	1991	5-25%	VL, L	5	0.4
Pleasanton	1978	15-20%	VL, L, M	300	12.0
Portola Valley	1991	15%	L, M	*	*
Richmond	2001	10-17%	VL, L, M	*	*
Rio Vista	2002	10%	L	*	*
Rohnert Park	2002	15%	VL, L, M	*	*

Table 2 Bay Area Cities With Inclusionary Zoning

City	Year imposed	Percent of new units under price controls	Target levels VL=Very Low; L=Low; M=Moderate	Number of price-controlled units produced by program	Average number of price-controlled units produced per year since program inception
San Anselmo	1995	10%	L, M	*	*
San Carlos	1991	10%	L, M	40	3.3
San Francisco	1992	10-17%	L, M	302	27.5
San Leandro	1980	10%	L	312	13.6
San Mateo	1992	10%	L, M	102	9.3
San Rafael	1988	10%	VL, L, M	611	40.7
Santa Clara	1992	10%	M	*	*
Santa Rosa	1992	15%	VL, L	385	35.0
Sebastopol	1994	20%	L	9	1.0
Sonoma	1995	10%	VL, M	11	1.4
S. San Francisco	2001	20%	L, M	*	*
Sunnyvale	1980	10%	L, M	749	32.6
Tiburon	1988	10%	L, M	19	1.3
Union City	2001	15%	VL, L, M	*	*
Yountville	1992	15%	VL, L, M	19	1.7

Sources: California Coalition for Rural Housing and Non-Profit Housing Association of Northern California, *Inclusionary Housing in California*, (Sacramento, CA: California Coalition for Rural Housing), 2003; and Calavita and Grimes, "Inclusionary Zoning in California: The Experience of Two Decades." *Journal of the American Planning Association* v 64 no.2, 1998, p. 152.

*The California Coalition for Rural Housing and Non-Profit Housing Association of Northern California does not report any units for these cities.

Advocates of inclusionary zoning herald price controls as the solution to the affordability crisis. They point to the inclusionary units produced and declare the program to be a success. While the program has been a boon to the few families who luck out on getting the artificially reduced homes, the ripple effect distortion in the market caused by inclusion zoning is overwhelming, costing far more. Obviously, a more thorough assessment of inclusionary zoning is necessary. From an overall production perspective, how effective has inclusionary zoning been? The numbers do not look good; in the 30-plus years that inclusionary zoning has been implemented in the Bay Area, communities with inclusionary zoning report that it has resulted in the production of only 6,836 affordable units.

Compared to the region's overall affordable housing needs for this period, inclusionary zoning clearly has not made a significant contribution to solving the region's affordable housing crisis. Looking forward, the conclusion is the same. For the 5.5-year period over 2001-2006, the Association of Bay Area Governments (ABAG) projected the Bay Area's affordable housing need for very low, low, and moderate income households to be 133,195 units, or 24,217 per year. Over the past 30 years, however, inclusionary zoning throughout the entire Bay Area has produced an average of only 228 units per year. Controlling for the length of time each program has been in effect, the average jurisdiction that reports creating some affordable housing with inclusionary zoning has produced only 14.7 units for each year since adoption of its inclusionary zoning requirement.

The disparity between the regional housing need and inclusionary zoning production is shown in Figure 2.¹² In Figure 2, the front (red) columns represent the average yearly production of affordable housing reported by cities (only for years when cities had inclusionary zoning) multiplied times 5.5, and the back (green) columns represent the five-year need for affordable housing in the cities with inclusionary zoning. The number of units expected from inclusionary zoning clearly pales in comparison to the regional need.

This point is further illustrated by Figure 3, which shows the percentage of affordable units anticipated from inclusionary zoning based on the number of units cities report to have produced so far. The program would have to be 20 times more effective each year before it could be relied on to meet the area's five-year affordable housing needs. Put differently, if the program continues at its current pace, it will take 100 years for inclusionary zoning to meet current five-year housing needs.

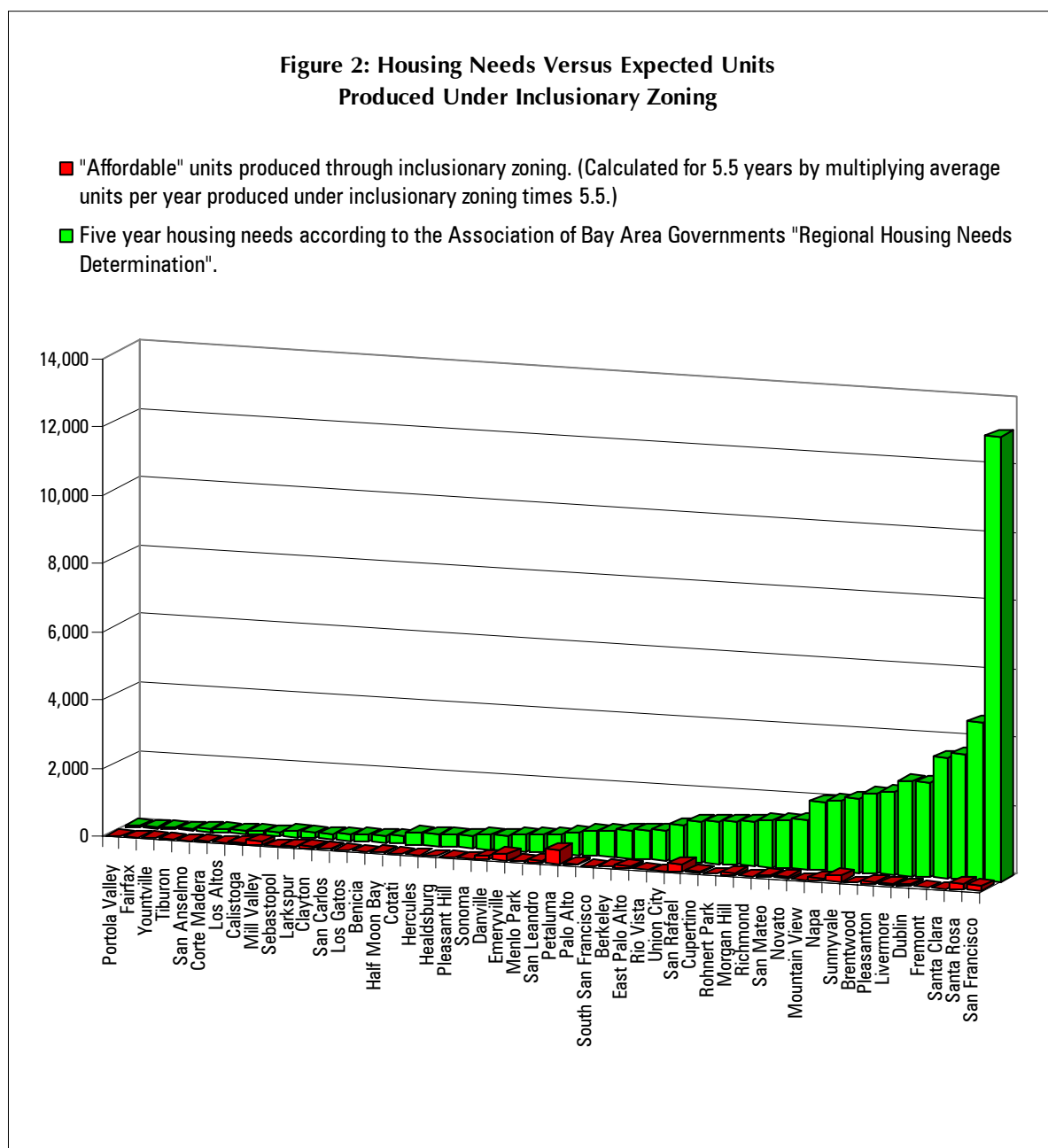
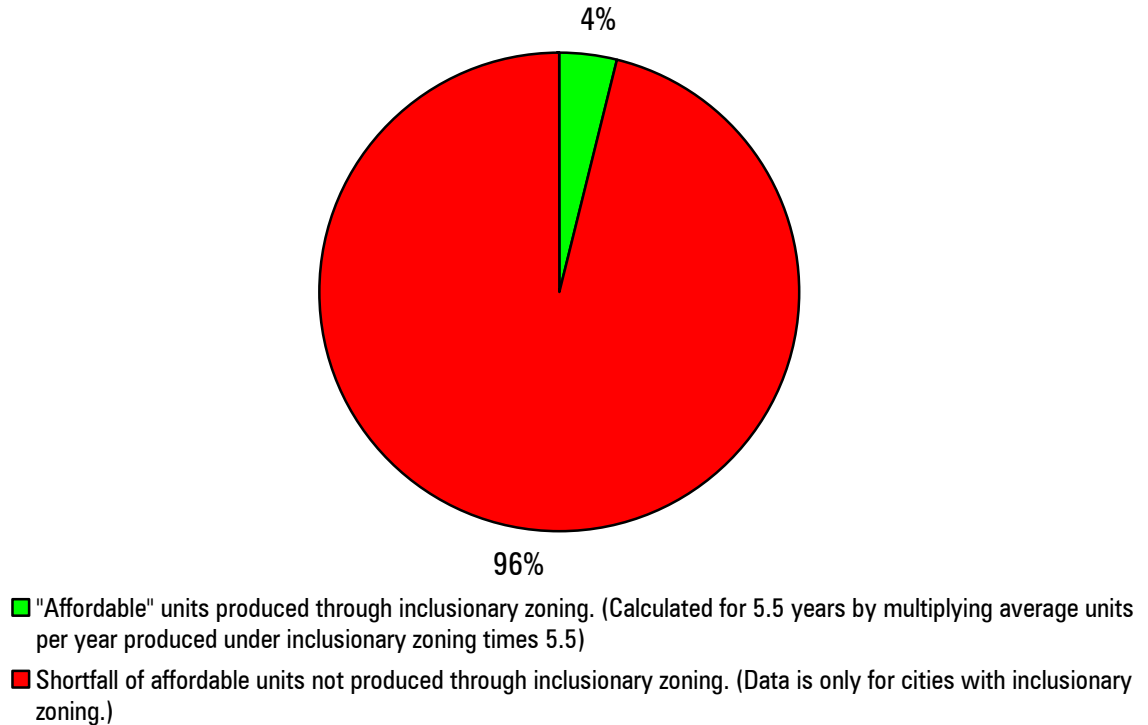


Figure 3: Fraction Of Affordable Housing Needs That We Can Expect to be Met Through Inclusionary Zoning.



From an overall production standpoint, inclusionary zoning has not been effective. Some advocates of inclusionary zoning respond to this poor record by calling for more vigorous and numerous restrictions. Instead, Bay Area jurisdictions need to fundamentally reexamine if price controls are an effective way of producing more affordable housing. Policymakers should analyze the actual consequences of inclusionary zoning and judge whether the poor results achieved by inclusionary zoning are caused by the very nature of these laws. Looking at the number of below-market units created by programs only begins to reveal inclusionary zoning's effect on affordability. Our findings suggest that inclusionary zoning actually leads to less housing and higher prices.

Part 3

Economics of Inclusionary Zoning

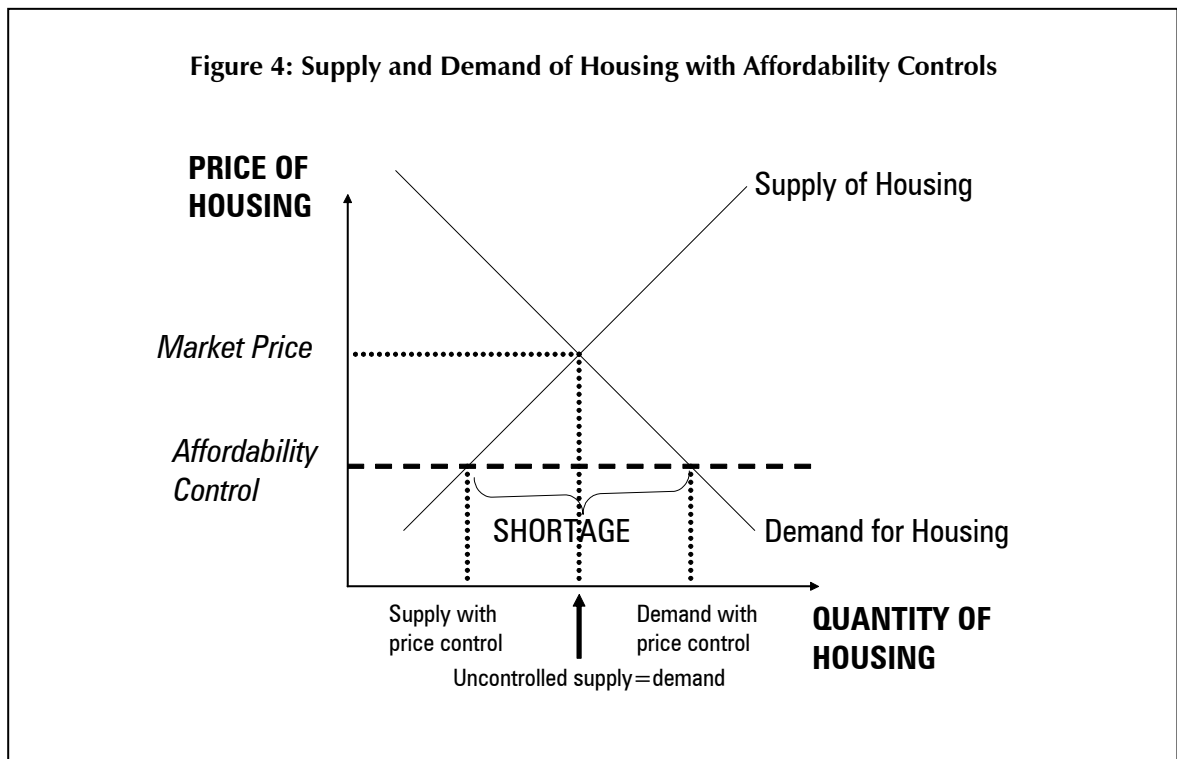
Before examining the evidence on inclusionary zoning, recognizing some basic economic principles will be useful. Prices can be determined in two ways: by relying on supply and demand (the market) or by using government price controls. Inclusionary zoning opts for using price controls on a certain percentage of units. Economists widely agree that when government sets prices below the market price, more housing will be demanded and less housing will be supplied.

When the price lowers, buyers will want more of an item, so as the price of housing drops, residents will demand more housing. The important question is whether more homes are supplied. If inclusionary zoning produces affordable homes that would not have been created, while not discouraging the creation of market-rate homes, then it would succeed in making housing more affordable. If, however, inclusionary zoning actually decreases the overall supply of houses and/or adds to the cost of housing, inclusionary zoning will raise prices on market-rate houses and price middle-income buyers out of the market.

The law of supply tells us that at lower prices fewer goods will be supplied. Builders decide to develop property based on expected profits and costs. Since inclusionary zoning restricts how much builders can charge for a portion of their development, expected profits go down while expected costs stay the same. We should expect builders to invest less in housing with inclusionary zoning than if government allowed prices to adjust to market conditions.¹³ In this way, restricting how much builders can charge will lead to less housing, not more.

Analyzing the interaction between consumers and sellers shows how setting the price of housing below market creates a shortage where demand for housing exceeds supply (Figure 4).

When housing demanded exceeds the supply, the available units must be rationed. In this case a lucky few get the units while everyone else is left out. Studies show that restricting housing prices to below-market rates creates a situation in which only a few people can find units at the low price, which of course burdens the majority of the consumers.¹⁴ An example of this shortage is the affordable housing complex *Rich Sorro Commons* near San Francisco's SBC Park. It had 2,700 applicants for only 100 units. A family had to be fortunate enough to be living in the city, apply, and then win a lottery to get one of the 100 units.¹⁵ The other 2,600 families, as well as low-income families who were unable to apply, did not benefit from programs that gave benefits to a select few. Thus, price-controlled units created by inclusionary zoning benefit a select few and create shortages for others.



The initial shortage described above is only the beginning of the economic consequences of inclusionary zoning. Proponents of inclusionary zoning often point out that its popularity with local government comes from the fact that the local government does not have to pay to create the units. But if a portion of homes are sold for below-market prices, the subsidy to those buyers must come from somewhere. When government sets price controls within a free market, that free market must absorb the costs of the price control. In this case, a market where they cannot get fair value for the costs of building a house repels builders. Since some units are built to sell for below-market rates in order for the builder to secure permission to build the market-rate units, the builder takes a loss. In order to remain solvent, he must accordingly pass this loss on to the landowner that he bought the land from, resulting in devaluation of land, and to the market-rate homebuyer to whom he sells. In this way, inclusionary zoning acts on the Robin Hood principle, robbing in this case the middle class to support the poor, in much the same way a tax does. And like goods that are heavily taxed, such as cigarettes and gasoline, the market cost is driven up in response to the increased cost of production. In housing, this leads to less building, as builders take their business to more development-friendly jurisdictions, and in turn less homes are available to purchase, resulting in higher prices of the few homes on the market.

The laws of economics clearly predict the consequences of inclusionary zoning. Restricting prices below market increases demand and decreases supply. When units must be sold for a loss, someone must pay for that difference. Landowners and market-rate buyers will ultimately pay the cost of the subsidized units. Unfortunately, this tax on new housing makes housing less affordable for everyone but the lucky few. Inclusionary zoning only exacerbates the affordability problem by increasing market prices and further discouraging supply.

Part 4

Costs Associated with Below-Market Units

Supporters often promote inclusionary zoning as a costless way of providing affordable housing. Many highlight the number of units produced under inclusionary zoning and then claim the program to be a success. But the costs of these units and programs are often missed. For example, the town of Tiburon has had inclusionary zoning since 1988, and the program has led to 19 affordable units. The initial reaction might be to consider the program worthwhile simply because 19 units were built. But accurately judging the efficacy of a program requires looking at its costs. What were the costs of producing each of those units?

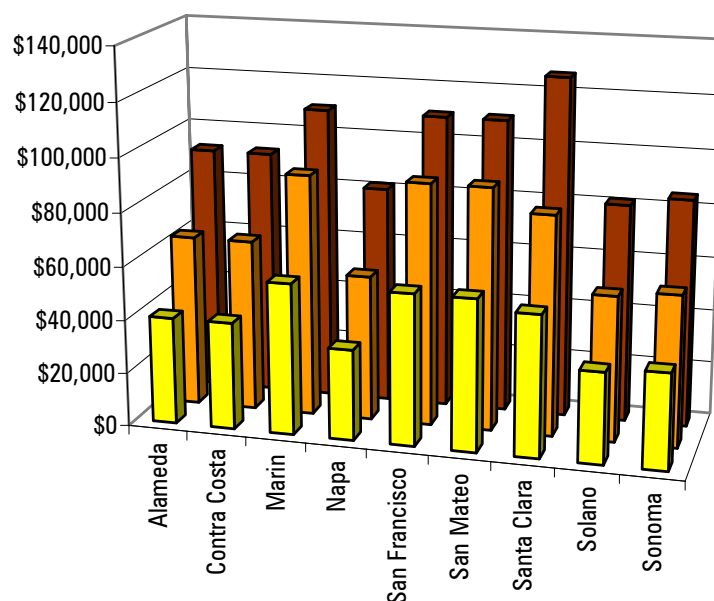
We all agree that the goal is to help low-income households, but we must recognize that some ways are better than others. If two methods cost the same amount but one helps more, we should choose the one that yields greater benefits. Or, if two methods yield the same benefits but one costs less, we should support the one with lower costs. Even though many cities have adopted inclusionary zoning, to date no one has comprehensively estimated the program costs. Without looking at the costs of inclusionary zoning, we cannot determine if better ways to provide affordable housing exist.

By definition, whenever sellers must sell a unit at a government-set price, they cannot sell that unit at the market price. For example, for a home to be “affordable” to a low-income household in Tiburon, the home must be sold for less than \$300,000. If a new home could be sold for \$1.4 million but must be sold for \$300,000, the revenue from the sale is \$1.1 million less. In high-priced jurisdictions these losses can be quite high. When someone forgoes one opportunity to take another, economists refer to this as the “opportunity cost.” The opportunity cost of selling a unit for \$300,000 is not selling the unit for \$1.4 million, i.e., \$1.1 million. Keep in mind that this does not measure production costs. Rather, it represents the lost revenue per sale of price-controlled units.

First, let us consider the cost associated with each inclusionary unit by city. We calculate the cost for each unit by subtracting the regulated price from the market price.¹⁶ Most inclusionary zoning ordinances mandate that homes be affordable to some combination of very low income, low income and moderate income households. Very low income is typically defined by up to 50 percent of median, low income is defined by up to 80 percent of median, and moderate income is defined by up to 120 percent of median.¹⁷ The California Department of Housing and Community Development provides income levels for four-person households (Figure 5).¹⁸

Figure 5: 2003 Income Levels for Four-Person Households Defined by California Department of Housing and Community Development

Very Low Income Low Income Moderate Income



Inclusionary zoning sets price controls such that homes can be “affordable” at the specified income levels. Table 3 indicates sample price controls for homes to be “affordable” to the four-person households in the respective income groups. We assume homes will be financed with 0 percent down, a 30-year fixed-rate mortgage, and an interest rate of 7 percent. We assume 26 percent of income will pay mortgage payments and 4 percent of income will pay for real estate taxes and other homeowner costs. This formula gives us how much a household in each income level could afford. We decided to use conservative assumptions so that we would not overestimate the costs of inclusionary zoning. Different jurisdictions use different formulas for calculating their price controls; actual price controls will differ accordingly. To the extent that families can afford less than our calculations assume or that jurisdictions set price controls more stringently than we assume, the costs of inclusionary zoning will be significantly higher than our estimates.

Table 3 Sample Price Controls for Homes to be “Affordable” to Different Income Groups*			
County	Very Low Price Control	Low Price Control	Moderate Price Control
Alameda	\$130,429	\$208,752	\$299,287
Contra Costa	\$130,429	\$208,752	\$299,287
Marin	\$184,164	\$294,728	\$357,582
Napa	\$110,401	\$176,674	\$264,930
San Francisco	\$184,164	\$294,728	\$357,582
San Mateo	\$184,164	\$294,728	\$357,582
Santa Clara	\$171,789	\$267,372	\$412,294
Solano	\$110,401	\$176,674	\$264,930
Sonoma	\$116,426	\$184,002	\$276,165

* HCD gives some counties the same income guidelines, so our sample price controls in those counties are the same.

We can then compare the level of the price controls to the market price of homes. The more restrictive the price controls, the greater the cost for each unit. Figures 6, 7, and 8 compare the median price of existing homes in each county to our sample price controls. The heights of lower (red) bars represent the price controls: “very low” in Figure 6, “low” in Figure 7, and “moderate” in Figure 8. The top of the upper (green) bars represent the 2003 average price of new homes by county. The difference between the market price and the price-controlled price (the height of the red bar) is the cost of providing the affordable unit.

Figure 6 “Very Low” Price Controls Compared to Average Market Price by County

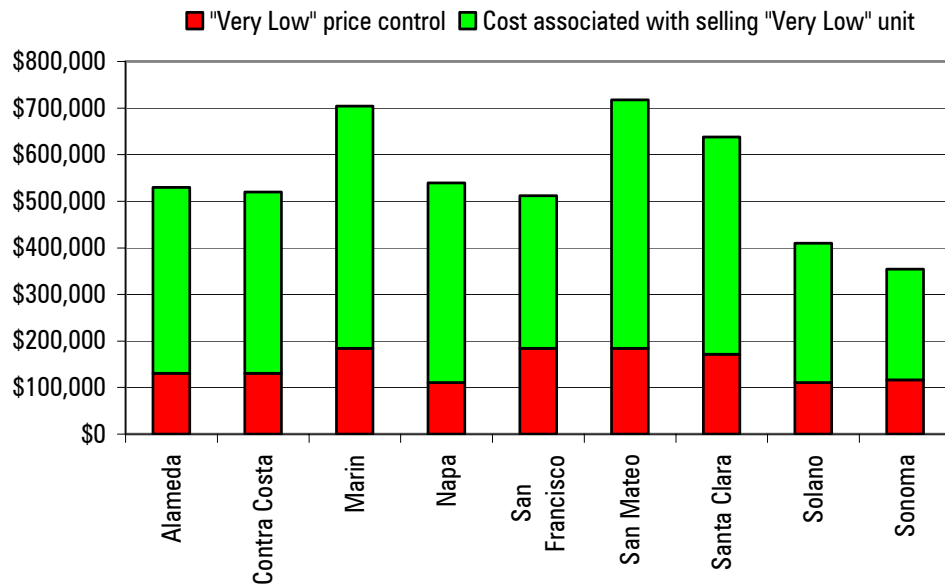


Figure 7 “Low” Price Controls Compared to Average Market Price by County

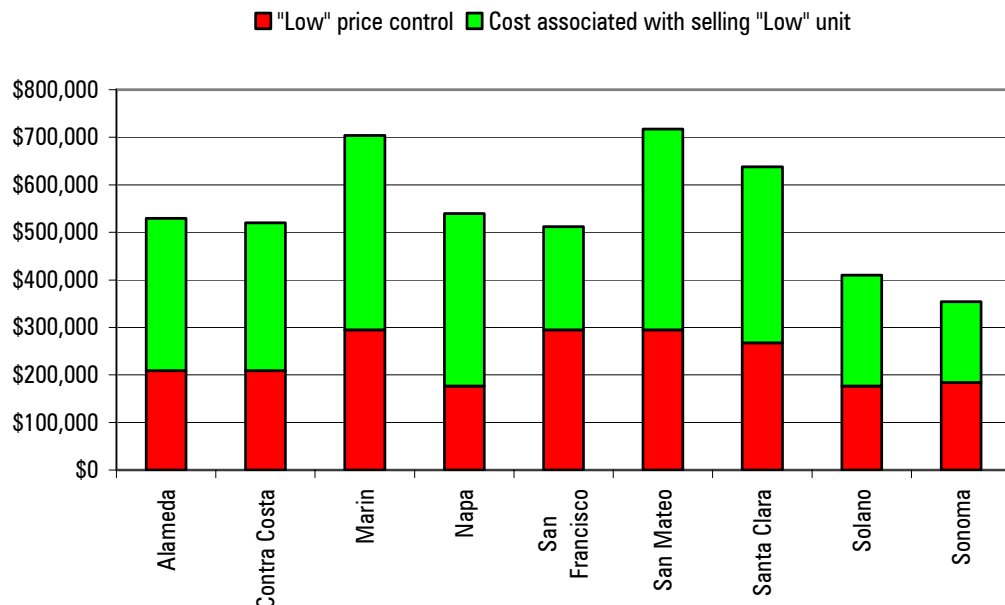
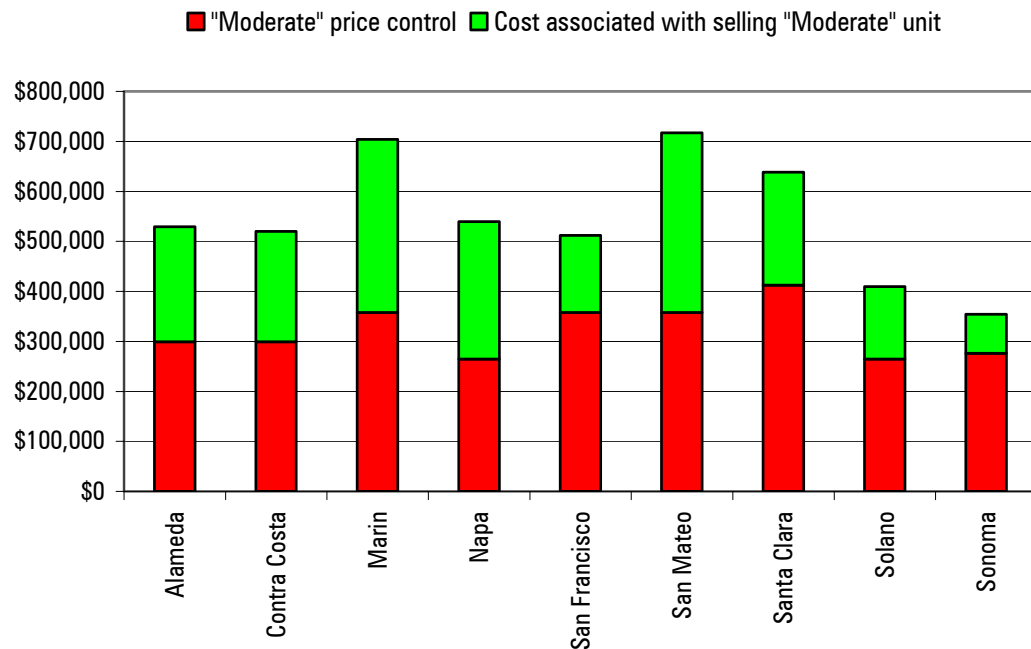


Figure 8 “Moderate” Price Controls Compared to Average Market Price by County

Comparing the figures, the “moderate” price controls are not as restrictive as the “low” price controls and impose less of a cost. When price controls are at the market price we would not count them as costly. In reality price controls set near the market price also cause builders to lose revenue because the price controls come with other restrictions.

Inclusionary zoning ordinances almost always impose restrictions on the resale price of below-market units. The reasoning seems straightforward: the subsidized units should remain affordable for future buyers, and the initial buyers should not be able to cash out on the windfall profits of acquiring a price-controlled unit.¹⁹ These affordability controls limit appreciation to some formula based on inflation, or they simply mandate that the home be “affordable” to the equivalent income groups calculated at the time of sale. Resale price controls typically last 30 years or more and are renewed upon each sale. Because home ownership is a long-term commitment and affordability controls last a number of years, price-controlled homes are simply less valuable.

Because buyers who purchase units with resale restrictions are not able to gain full equity appreciation in the home, they will be willing to pay less for those units and so “moderate” price-controlled homes often sell for less than the maximum allowable value. Interviews with homebuilders illustrated this problem to us. One builder reported that in a development in Dublin, California, “Our inclusionary requirement obligates us to sell to moderate income buyers for up to \$280,000 per unit, but because of all the resale restrictions and difficulties qualifying buyers, we actually have to sell the units for much less. Currently we are having difficulty selling the units at a price of \$255,000.”²⁰ Similarly, another builder reported that, “A 4-bedroom townhouse at moderate rate, up to 120 percent of median income, in Marin County can be priced at over \$480,000. Market for these homes is about \$480,000 but we are unable to sell these homes [the restricted ones] for more than \$380,000. The reason is the deed restriction that limits the buyer’s ability to sell the home in the future.”²¹ Because resale restrictions lower home values to consumers, they make builders sell at

levels lower than the price controls when the restricted price is close to the market price. Our estimates do not include these costs.

A. Estimating the Effects of Price Controls by City

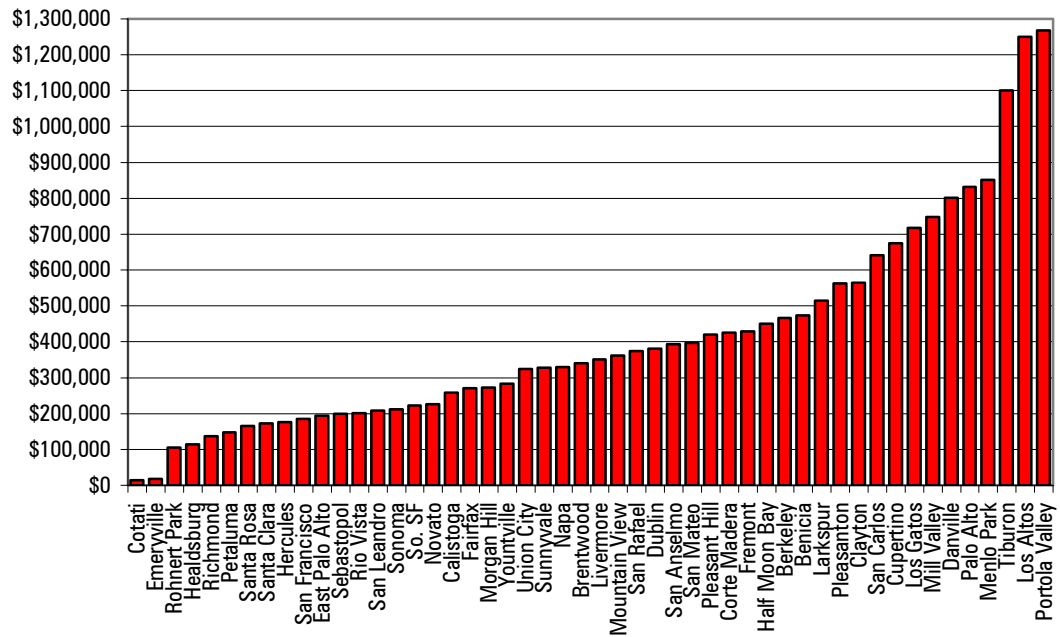
By comparing the market price to the average level of the price controls in each city, we can estimate the average cost of each price-controlled unit and the total costs for each city. Each ordinance targets different income levels, so each city's price controls will vary. For example, if a city in Alameda County required that 15 percent of new units be "affordable" and its only target income group was "very low," we assumed that 15 percent of units needed to be sold for \$130,429 each. Or, if a city in Alameda County required that 15 percent of new units be "affordable" and its only target income group was "low," we assumed that 15 percent of units needed to be sold for \$208,752 each.

For cities with more than one target income group, for the sake of simplicity we took the average level of the price controls. For example, if a city in Alameda County required that 15 percent of new units be "affordable" and the target income groups were "very low," "low," and "moderate," we assumed that 5 percent of the units needed to be sold for \$130,429 each, 5 percent for \$208,752 each, and 5 percent for \$299,287 each. Taking the average of those figures, we arrive at our estimate that 15 percent of units need to be sold for \$212,823 each. Because many towns targeting multiple income groups do not target each income group equally, our estimates will not be 100 percent accurate. If a city targeting multiple income groups requires more "very low" units, our estimates of the costs of zoning will be on the low side. On the other hand, if a city requires more "moderate" units, our estimates will be on the high side. In addition, when a jurisdiction required 10 to 15 percent of units to be affordable, we always chose the lower bound and ignored the upper bound in order not to overestimate the costs of inclusionary zoning.²²

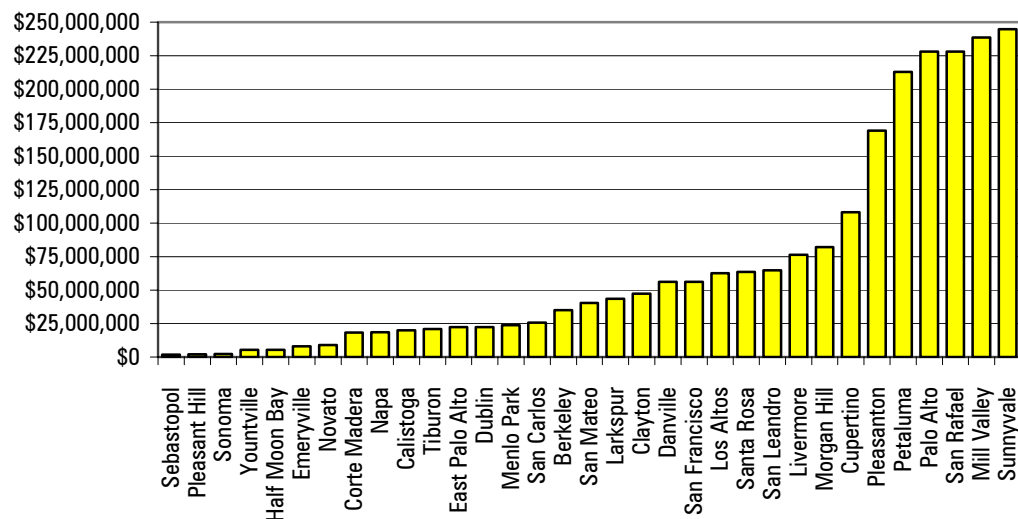
Once we arrived at the average price control for each city, we then subtracted it from the market price for each city.²³ For example, we estimate that a new home in Tiburon could be sold for \$1,426,997. Tiburon requires that 5 percent of homes be priced at "low" and 5 percent at "moderate," which we conservatively estimate at \$294,728 and \$357,581, an average of \$326,155 per home. That means 10 percent of homes would need to be sold for \$1,100,842 less than market price. In other words, the cost of providing a single inclusionary unit in Tiburon is \$1.1 million.

In actuality, the cost for each price-controlled sale is much larger. Compared to our conservative assumptions (that diminish the costs of inclusionary zoning), Tiburon sets price controls for "affordability" much more strictly. Its ordinance assumes an interest rate of 9.5 percent, assumes 25 percent of income can be devoted to mortgage, and defines moderate as 80 percent of median rather than the standard 120 percent. According to Tiburon's ordinance, a "moderate" price-controlled home can be sold for no more than \$109,800. That means the actual cost for each "moderate" price-controlled home in Tiburon is \$1,317,197, not \$1,100,842 per home as we estimate. Nevertheless, we want to err on the low side for our estimates of the costs of inclusionary zoning, so we present the data according to our conservative assumptions.²⁴ Even so, the costs imposed per inclusionary unit are considerable.

Figure 9 shows the average cost associated with selling a price-controlled unit based on the standards in those cities and the market prices. In cities with more restrictive price controls and higher land values, the cost is higher. In the median city the cost of providing each inclusionary unit is \$346,212. In one fourth of the jurisdictions the cost exceeds \$500,000 per unit.

Figure 9: Average Cost Associated With Selling Each Price-Controlled Unit

The cost of each inclusionary unit is large. Next let us look at the cost per unit times the number produced in each city (Figure 10).²⁵ This gives a measure of the aggregate cost of inclusionary units by city for those that report creating affordable homes under inclusionary zoning.

Figure 10: Average Cost Associated With Selling Each Price-Controlled Unit Times the Number of Units

Including cities in the Bay Area that just adopted their programs, the median city's cost of below-market units was more than \$18 million. The average cost per city is \$45,273,630, and in seven cities the cumulative cost of producing the inclusionary units exceeds \$100 million. Considering that most of these cities have a population of well under 100,000, these numbers are quite substantial. According to our estimates, the costs associated with producing inclusionary units in the entire Bay Area have been \$2.2 billion.

B. Who Bears the Burden of Inclusionary Zoning?

The costs of inclusionary zoning are largely hidden. None of the costs imposed on the housing market shows up on any city's annual budget, but they still exist. Who ends up paying for that \$2 billion for below-market rate homes? One can debate exactly who bears the costs, but they are necessarily borne by someone. Because they are imposed on the new housing market—and not paid for by government—the costs will be borne by some combination of developers, new homebuyers, and landowners. Exactly who shoulders more of the burden depends on market conditions and supply and demand.

All theory and evidence suggest that the costs of inclusionary zoning will not be borne by builders but by new homebuyers and landowners.²⁶ Construction is a competitive industry with relatively free entry. Local market conditions will determine exactly how the burden is split. If buyers are more sensitive than sellers to changes in price, then landowners will bear most of the tax. This happens when more buyers have many options, such as living in similar or nearby areas. If sellers are more sensitive than buyers to changes in price, then new homebuyers will bear most of the tax. This happens when landowners have more options, such as being able to devote their land to commercial, industrial, or other endeavors.

If profits are abnormally high, other builders will enter the market and undercut prices, thus bringing profits down. Conversely, if profits are abnormally low it will drive would-be-builders to invest in other endeavors. When a tax in the form of inclusionary zoning is placed on builders, it decreases the number of profitable projects that they want to undertake in that jurisdiction. Builders will vote with their feet and undertake fewer projects in jurisdictions with price controls and more in neighboring jurisdictions without price controls. The quantity of housing produced will decrease where there are price controls, but increase in other places where there are not price controls, pushing some homebuyers away from their first choice of locations, and for developers profit rates at the margin will remain the same.

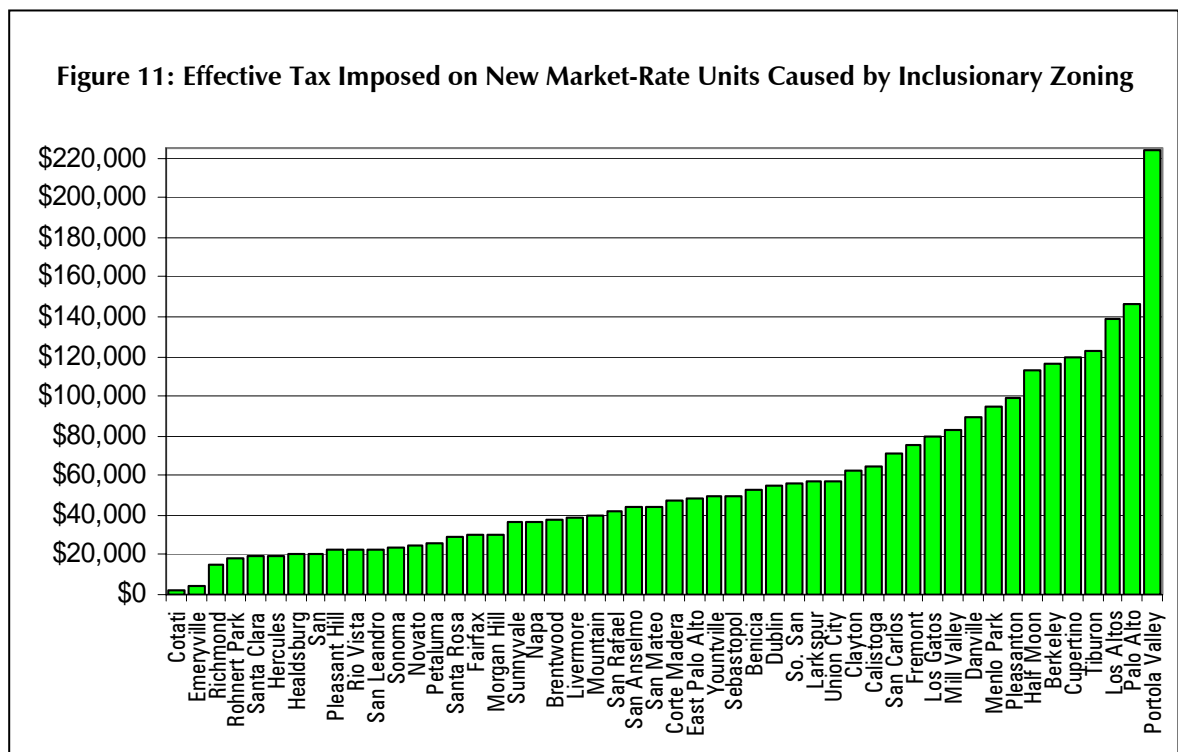
Price controls may not stop all development, but new construction will decrease. In order for development in a price-controlled city to be profitable enough to attract builders, one of two things has to happen. Either market-rate home prices must increase, or land prices must decrease to compensate the builder for his losses due to price controls. Even with price controls on a portion of development, builders can still earn the normal rate of return if other home prices increase or land prices decrease. The likely result will be some combination of the two.

Both effects lead to a decrease in the quantity of new housing as market-rate buyers will be able to afford less housing and/or landowners will supply less land for residential development due to low market prices. Raising home prices for other new homebuyers creates a paradox because the alleged goal of inclusionary zoning is to make housing more affordable, not less. Decreasing land prices also decreases the quantity of new housing because it discourages landowners from providing their land for residential projects. Instead, more land will be put to uses in which the final product is not subject to price controls. Thus, the restriction on the supply of land restricts the supply of new homes.

Advocates of inclusionary zoning tend to assume that the below-market rate units are subsidized out of builder profits, but economics predicts that builders are actually least likely to bear the burden. In the very short run, if builders own the land when the ordinance was passed, they would bear part of the burden. But in the long run, builders are most able to avoid the tax because they can simply move their construction to more profitable locations. The land cannot move, and buyers are often attached to living in a particular locale. Landowners and new homebuyers will end up paying for the subsidy for the price-controlled units.

Inclusionary zoning effectively acts as a tax on the production of market-rate units because developers must sell a percentage of units at a loss to gain permits to sell market rate units. If market prices went up by the exact amount of losses on the price-controlled units, buyers would bear the full burden of the tax. If market prices did not change at all, builders and landowners would bear the full burden of the tax. In most situations buyers and sellers each bear part of the tax burden. Regardless of who bears the burden, because some units are price-controlled and others are not, the losses from price-controlled units must be spread over some combination of buyers and sellers of the remaining units.

We calculate the effective tax in each city by looking at the average cost associated with each inclusionary unit and the number of market-priced units over which the cost will be spread. To do this we multiply the cost of each inclusionary unit times the percentage mandated by each city and then divide by the percentage of market-rate homes. To illustrate, for Mill Valley each price-controlled unit has an associated cost of \$747,899 (Figure 9) and 10 percent of units must be sold at those price controls (Table 3). The calculation would be $[(\$747,899) \times (0.10)] / (0.90) = \$83,100$. To make it more concrete, if a project had 10 units, one must be sold at a loss of \$747,899. Spreading the loss over the remaining nine units gives a loss of \$83,100 per market-rate unit. Figure 11 shows the effective tax on new home purchases imposed by inclusionary zoning. Inclusionary zoning imposes sizeable taxes on each newly constructed home. The median city with inclusionary zoning is effectively imposing \$45,721 of taxes on each market-rate home.



In the seven cities with the most restrictive programs, inclusionary zoning imposes an equivalent tax of more than \$100,000 per home. In Portola Valley the equivalent tax if a developer built and sold an affordable home is well over \$200,000 per newly constructed home. Cities with higher land values and more restrictive price controls impose the highest effective tax on new homes.

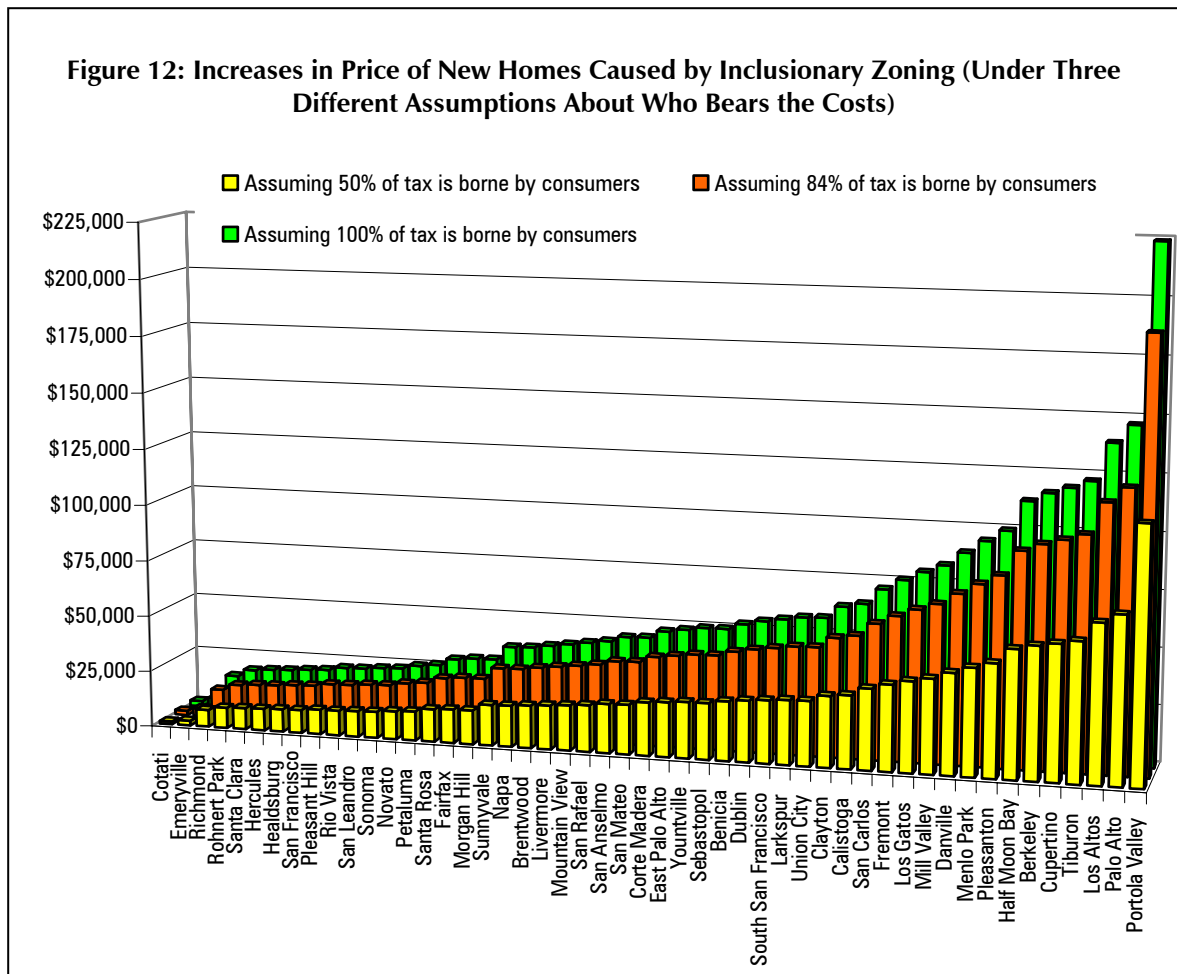
After having calculated the amount of the tax, we can approximate who bears the brunt of the tax. The California Department of Housing and Community Development (HCD) takes the position that inclusionary zoning translates into higher prices for new homebuyers. HCD has consistently held this position through both Republican and Democratic Administrations:

Under most inclusionary programs, which typically include an in lieu fee [whereby the builder pays a fee to opt out of the inclusionary zone requirements] option, the cost of subsidizing low-income housing units is underwritten by the purchasers of market-rate units in the form of higher housing prices. This practice of cost shifting is particularly detrimental to a home buyer who marginally qualifies for a mortgage yet earns too much to receive governmental assistance.²⁷

We have consistently...asked local jurisdictions to analyze an inclusionary program as a potential governmental constraint. The reasoning for this is that most programs of this sort impose a fee or dedication requirement upon developers which is passed on to consumers of new market rate housing, raising the price of the market rate housing.²⁸

Others believe the brunt of the tax will be borne by some combination of builders and landowners.²⁹ Figure 12 estimates price increases on new homes under the three scenarios. If the lower bound is accurate (when buyers only pay 50 percent of the tax), the price of new homes is increased by \$20,000 or more in 29 Bay Area cities. If the upper bound is accurate (when buyers pay all of the tax), the price of new homes is increased by \$20,000 or more in 45 of the 51 Bay Area cities with inclusionary zoning. San Mateo is the median city; inclusionary zoning increases new home prices there by \$22,064 in scenario one, \$37,067 in scenario two, or \$44,128 in scenario three. Portola Valley imposes the largest burden; inclusionary zoning there increases new home prices by \$111,921 in scenario one, \$188,028 in scenario two, or \$223,842 in scenario three. Although the goal is to produce more affordable housing, inclusionary zoning is actually producing the opposite effect. Inclusionary zoning translates into significantly higher prices for market-rate homebuyers. By creating price controls on a percentage of units, it taxes other new units and leads to higher housing prices.

To the extent that sellers bear more of the burden of taxation, the housing market also faces negative consequences. Because builders can move to jurisdictions without inclusionary zoning, they will not bear the burden of the inclusionary zoning tax. Thus, landowners will bear most of the sellers' portion of the burden. Inclusionary zoning ordinances decrease the value for which landowners can sell undeveloped land to homebuilders. Because landowners receive lower prices, they will supply less land for residential development, and fewer homes will be built.



Governments already give landowners incentives to supply land for commercial and industrial uses instead of residential ones. Since Proposition 13 limited increases in residential property taxes, governments began creating incentives for developing commercial real estate instead of residential because it generates more revenue. This has become known as the “fiscalization of land use.” One study described how local governments responded to limits on property taxes this way:

Local municipalities employ two primary methods for revenue generation: the imposition of heavier exaction fees for new development and the promotion of retail development in order to maximize sales tax revenues. This has had a direct, deleterious impact on new housing production. Rather than adopt land-use policies that advance or incentivize new housing production, developing new retail centers — such as big box developments, entertainment complexes, and shopping destinations — emerged as the primary approach for increasing local government revenue. Consequently, residential development (and other forms of development) suffered due to a lack of incentives or outright disincentives.³⁰

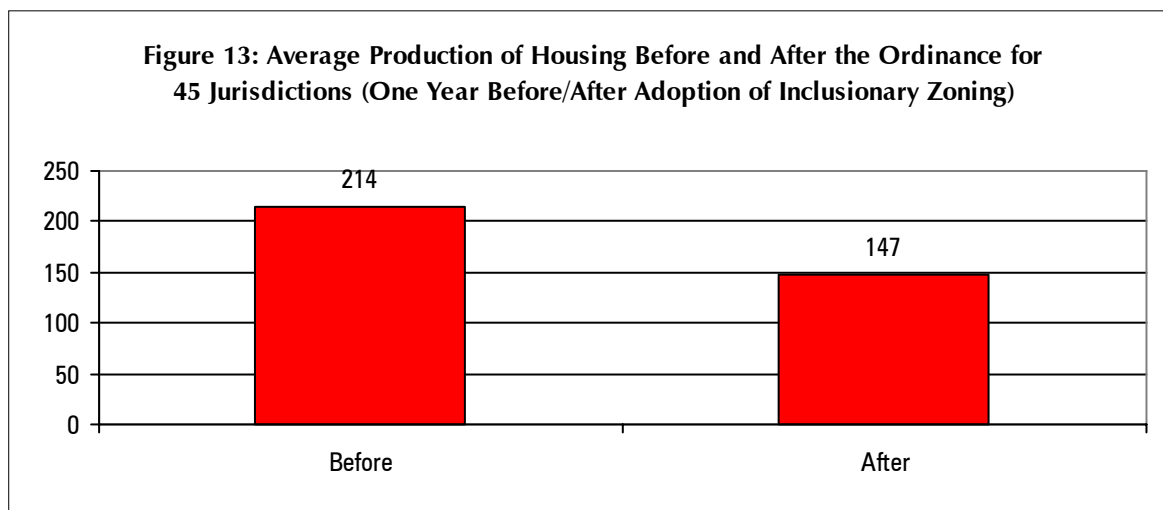
Inclusionary zoning ordinances add yet another disincentive to provide land for residential development. When part of the burden of taxation is borne by landowners, we should expect inclusionary zoning to decrease the supply of new housing.

C. The Effect of Price Controls on Housing Construction

In addition to increasing prices, inclusionary zoning leads to a decrease in new housing. Economics clearly predicts that the quantity of construction will be lower after the adoption of inclusionary zoning. But advocates of inclusionary zoning advance an alternate hypothesis that the quantity of construction will be the same (or higher) after the adoption of inclusionary zoning. By looking at the data of housing construction, we can get an idea of which hypothesis is correct.

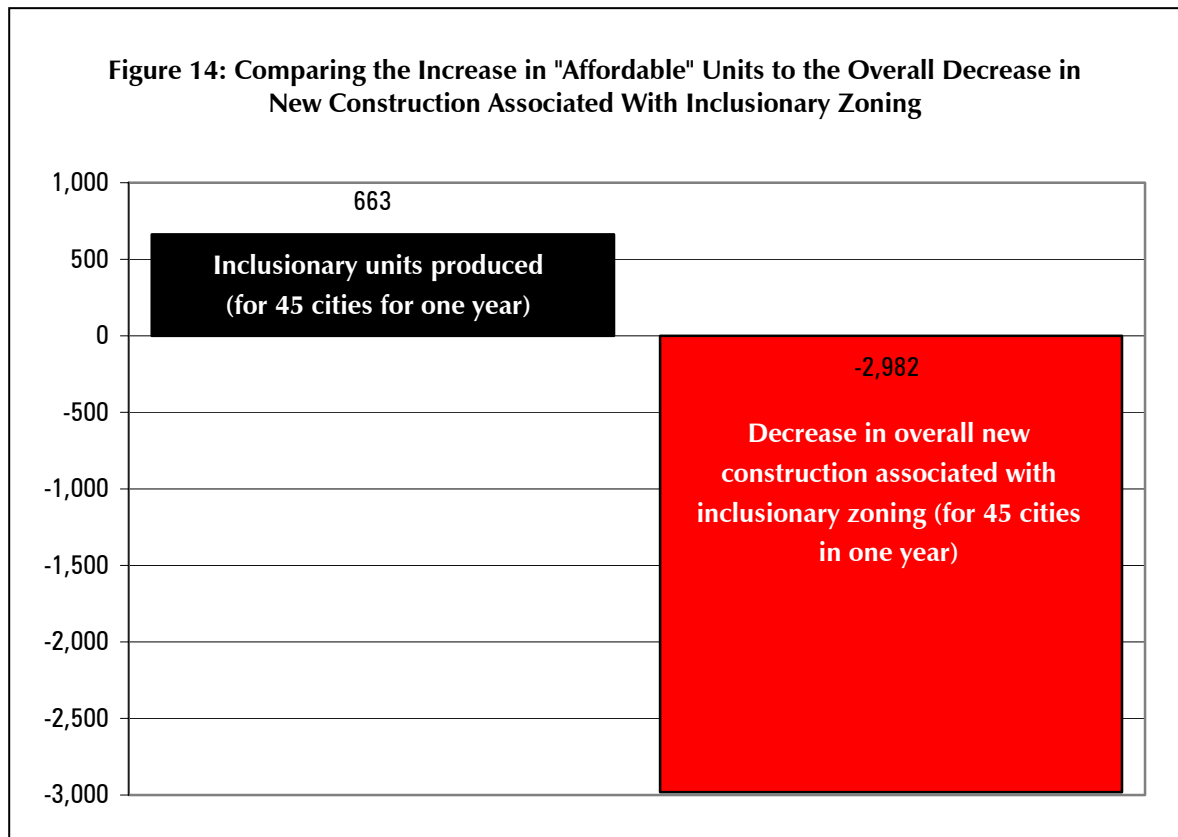
One test is to look at the amount of new construction in years prior and years following the adoption of an inclusionary zoning law. We examined Construction Industry Research Board yearly housing permit data for single and multifamily dwellings to compute average construction pre- and post-ordinance. For example, Larkspur adopted its ordinance in 1990 and Union City adopted its ordinance in 2001. We would thus compare Larkspur housing construction in 1989 and 1991, and Union City housing construction in 2000 and 2002. We also looked at three-, five- and seven-year averages before and after the ordinances and found similar results. Because ordinances have been adopted throughout the past 30 years (Figure 1), economy-wide phenomena such as business cycles should not be biasing the data in either direction.

The data indicate that inclusionary zoning does indeed lead to a decrease in new construction. Figure 13 shows the average production of new residences in the year prior and the year after the adoption of inclusionary zoning. In the year prior to the adoption of inclusionary zoning, the average city added 213 new residences, whereas in the year following the adoption of inclusionary zoning, the average city only added 147 units. For the 45 cities in the sample, that amounted to 9,618 units the year prior to the inclusionary ordinance and 6,636 units the year following the inclusionary ordinance. On average, new construction fell by 31 percent in the year following the adoption of the inclusionary zoning ordinance.



Recall that over the past 30 years inclusionary zoning in the Bay Area has only led to a reported 6,836 affordable units, which amounts to 228 per year. If we look at the 45 inclusionary cities that produce the yearly average of 14.7 units, we might expect as many as 663 units per year. For the 45-city sample, however, the data indicates that inclusionary zoning may be decreasing the production of housing by upwards of 2,982 units per year (Figure 14). This is crucial because most entry into the housing market by lower-income families is by buying older homes freed up when middle-income families move into new

homes.³¹ Reducing the overall production of housing both drives up prices and means that the people crowded out of the housing market are the lower-income would-be homeowners.



To check if one-year results were not coincidental, we examined construction for the seven years prior and seven years following the ordinance. We found similar results.³² This 14-year data exists for 33 cities. In those cities we found that in the seven years following the adoption of inclusionary zoning housing, production decreased by 10,662 units. In the sample the median city's (median) value of existing homes is \$611,651. If those 10,662 units would have been worth \$611,651 per home, then the value of housing not built because of inclusionary zoning is approximately *six and a half billion dollars*. For those 33 jurisdictions, in only seven years the average destruction of value per city is \$198 million.

Additional statistical work on inclusionary zoning is needed. The data indicate that the number of units pushed out of the market by inclusionary zoning is much larger than the number of "affordable" units built. Advocates of price controls must recognize that their programs lead to only a handful of below-market units coupled with a sharp decrease in market-rate homes. Because we cannot directly observe the thousands of homes never built, the costs of the program go largely unseen. Also unseen are the 2,982 families each year that cannot buy homes because inclusionary zoning prevented the construction of additional homes. Is a program that destroys billions of dollars worth of housing and prevents thousands more families from getting a home than it places in an "affordable" unit worth the high costs?

Part 5

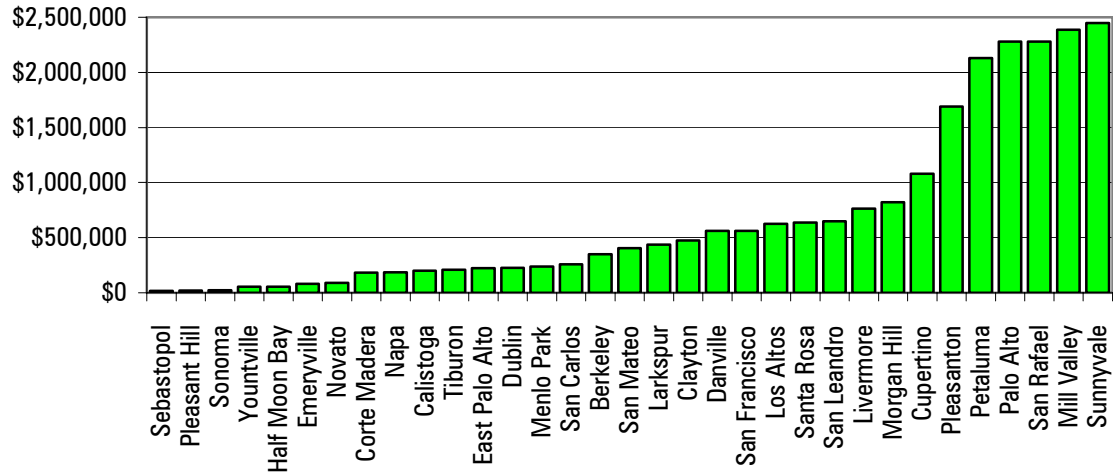
The Fiscal Cost of Price Controls to State and Local Government

Not only do price controls lead to a decrease in the quantity of housing and an increase in prices for consumers, but price controls also lead to decreased revenue for both state and local government. Inclusionary zoning ordinances are often sold to policymakers as the proverbial free lunch, with proponents claiming, “A vast inclusionary program need not spend a public dime.”³³ Even if market-rate buyers and landowners end up paying the price of the subsidy, so the argument goes, at least local governments need not spend revenue to create affordable housing. Proponents write, “From a local agency standpoint, inclusionary zoning provides affordable housing at *no public cost*” (emphasis added).³⁴ The story, however, is not that simple. The advocates fail to take account that inclusionary zoning leads to direct losses in state and local government revenue.

Inclusionary units demand and receive the same municipal services as market-rate homes. There is no evidence that providing municipal services to price-controlled homes is less costly than providing to market-priced homes. The cost of inclusionary zoning to governments comes from the fact that price-controlled homes cost the same to service but generate less revenue. Because the values of the homes are set at below-market rates, the assessed values are lower and so their property tax is lower. Thus, although governments may not spend “a public dime” to produce price-controlled homes, they take on an obligation of providing municipal services while receiving lower annual tax revenues. The cost to government from price-controlled units is the difference in the annual tax revenue that would have been generated had the same homes been assessed at market prices.

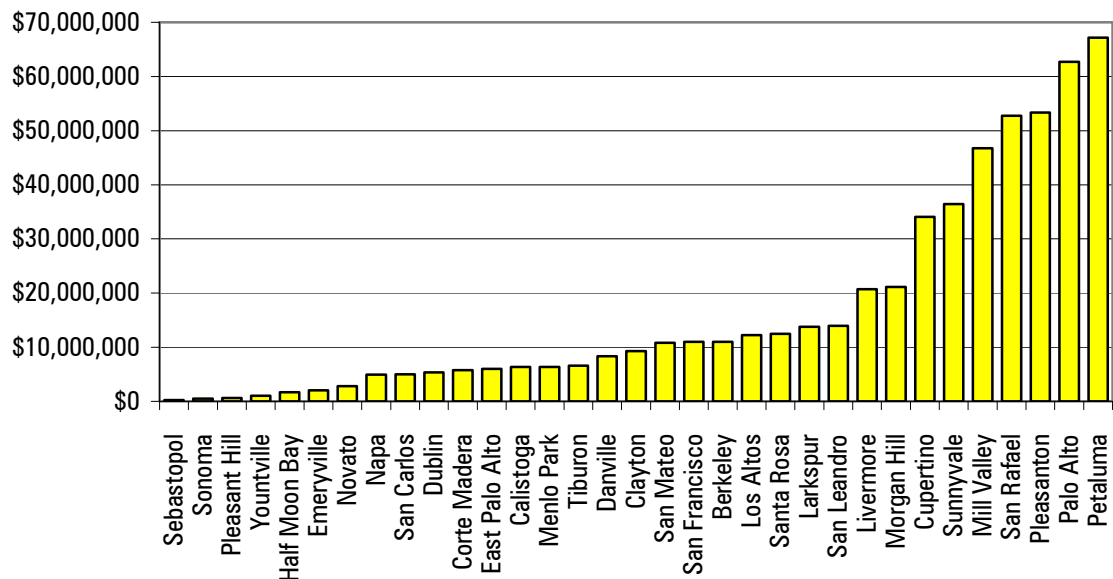
If the real estate tax rate is 1 percent per year, a \$700,000 dollar home generates \$7,000 in government revenue, whereas a \$200,000 home generates \$2,000 in government revenue. To calculate the yearly tax revenue lost we take the difference between current market price and the price-controlled price times 1 percent (for the property tax) for each unit. Multiplying times the number of units in each jurisdiction gives us a rough measure of the lost tax revenue per year. Biasing our numbers downward is the fact that we do not count the lost revenue from the homes never produced because of price controls. Biasing our numbers upward is the fact that not all market-rate homes are assessed at current prices due to Proposition 13. But the numbers illustrate the limit as homes are frequently resold and reassessed at current prices. They also approximate how much revenue would be gained if price-controlled units were reassessed at market rates. We do not believe that the goal is to maximize tax revenue at the expense of low-income households, and we are not advocating raising real estate taxes for low-income residents. But before considering inclusionary ordinances, governments must look at their budgets and examine whether better ways of helping low-income households exist.

Figure 15: Yearly Loss in Combined State and Local Government Revenue Due to Price Controls (Assuming All Units Are Assessed at Current Prices)



Government would be well advised to consider these yearly costs before adopting inclusionary zoning. It is important to note that the lost tax revenue occurs not just in one year but every year that the price controls are in existence. The total present value of lost government revenue is \$553 million (Figure 16).³⁵ Although inclusionary zoning is often pitched to governments as a zero-cost method of creating affordable housing, the costs from lower assessed valuations are quite large.

Figure 16: Present Value of Yearly Loss in State and Local Government Revenue Due to Price Controls (Assuming a Discount Rate of 3 Percent and That All Units Stay Assessed at Current Prices)



Both state and local governments bear some of the burden of lost tax revenue caused by inclusionary zoning. Property tax revenue goes to the state government, and a portion is rebated back to city and county governments. The exact amount returned to each jurisdiction varies significantly, so our above estimates measure the combined total of lost tax revenue without distinguishing the particular splits between local and state governments. An important implication from this is that although inclusionary zoning policies are usually debated and implemented at the city and county levels, state legislators should be concerned with these policies too. Each additional local inclusionary zoning ordinance adversely impacts the tax revenue not just of its own jurisdiction but also decreases the state's tax revenue.

Part 6

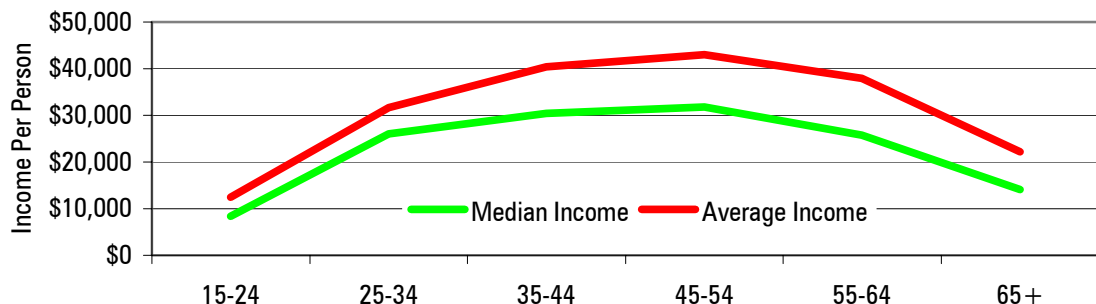
The Effect of Long-Term Affordability Controls

The resale restrictions imposed by inclusionary zoning ordinances devalue homes and create unintended incentives that undermine the goals of inclusionary zoning. Administering and policing these resale price controls, which typically last 30 years or more and are renewed upon each sale, generate additional expenses for local governments.

A. Incomes Change

Inclusionary zoning may not be the best method to help low-income families because it gives long-term subsidies to households that may not stay at low incomes. To the extent that households remain in units after their incomes rise, the unit may not be occupied by the most deserving families. Providing homes at below-market rates gives long-term benefits to some who may only need short-term help. Inclusionary zoning targets households currently low-income but usually does not take potential future income increases into account. Most people have lower incomes in their twenties and thirties (at the beginning of their careers), higher incomes in their forties and fifties (at the peak of their careers) and then higher wealth but lower annual income in retirement (Figure 17).³⁶ The affordability requirement misses all of this. People at the start of their career may be low-income and qualify for an affordable unit today, but may end up making much more money later on. Given the nature of the affordability controls, however, those who receive the affordable units will be able to keep their below-market housing payments even after they are in higher-income brackets.

Figure 17: U.S. Median and Average Income by Age



Source: Data are from U.S. Census Bureau: Historical Income Tables—People 1974-2001; Table P-10.

Research shows that most low-income households actually move into higher-income categories as time moves on. *University of Michigan Panel Survey on Income Dynamics* data show that of those in the bottom 20 percent income bracket in 1975, only 5.1 percent of them remained in that lowest income bracket by 1991. In fact, 29 percent of the lowest fifth of income earners in 1975 had moved to the top 20 percent of income earners in 1991. This means that price-controlled units can continue to subsidize households for years while ignoring their increasing incomes. Tying long-term assets such as homes to programs aimed at helping low-income households is usually not the most efficient way to help low-income earners. The funds could be more effectively targeted by tying subsidies to shorter-term cash flows that do not remain as people move through their lifetime earnings cycles onto higher incomes.

B. Incentives for Mobility and Improvements

Despite the fact that families may stay in their subsidized home years after their incomes rise, resale price restrictions are put in place with the hope that eventually the home will be sold to another low-income family. One advocate summed the reasoning for resale restrictions: “In order to ensure that affordable units remain affordable to the same income population for whom they were targeted, inclusionary zoning ordinances must include provisions for maintaining affordability for a specified period.”³⁷ Despite their good intent, resale restrictions adversely impact the incentives for residents to move as well as maintain their property.

Many people sell their first starter home and move to larger homes as their earnings increase over their lifetime, but price controls create incentives for families to stay in their homes long after they need them. One of the main benefits of homeownership is building equity in a home that can appreciate in value. Inclusionary zoning removes this benefit because it controls resale prices. Because appreciation is limited, owners of price-controlled units often cannot build up the necessary equity to afford a down payment on a larger market-rate home. So even as incomes rise, a disproportionate percentage of those in price-controlled units will remain in them longer than they would otherwise choose. While families may initially feel lucky to have received a subsidized home, in the longer term the wealth constraint imposed by limiting appreciation actually may serve to trap them in a lower quality of housing by limiting their ability to upgrade.

Also, because owners of restricted units are not permitted to sell at market price, much of the incentive to maintain the property is taken away. This makes it more likely that price-controlled units will deteriorate over time. Even the owner of a less well-maintained property would be able to find buyers if the legally mandated price is significantly below the market equilibrium price. Owners of restricted units who spend resources maintaining their home have to pay all of the costs and receive few of the benefits. In addition, because the potential for the sweat-equity gains of home improvement are taken away, improvements are less likely to be made. Consider the case of one resident of Palm Springs. Richard Fontius did not realize his inclusionary zoning home had resale price restrictions placed on it over two decades ago. He recently remodeled the home, adding a swimming pool and 400 square foot addition, and planned on selling it after the improvements. Now the city is considering enforcing the resale price restrictions. Richard Fontius says, “If I knew about it to begin with I would not have bought it.”³⁸ The many residents aware of their resale restrictions will be less likely to improve their homes or spend resources to prevent deterioration. The problems will worsen over time as already pricey market-rate homes increase in value but homes under price controls do not. Occupants of price-controlled homes may feel like second-class citizens because the government prevents them from gaining in equity.

Some government agencies realize the problems created by resale restrictions. One city's report assessing its inclusionary zoning program noted, "Failure to consider improvements in the calculation of resale value may discourage property owners from investing in improvements."³⁹ It also wrote that, "The question of resale value highlights the conflict between preserving the stock of affordable units and allowing the build-up of equity for the owners' use."⁴⁰ Other jurisdictions are more blunt. Dennis Lalor, the executive director of the non-profit that manages the city of Hollister's resale restrictions, said simply, "The idea of wealth creation was never part of this [inclusionary zoning]."⁴¹ Unfortunately, the unintended consequences of preventing wealth creation are that families remain in the price-controlled units even after their incomes rise, thus preventing other low-income families from moving in. In addition, the properties deteriorate because there is less incentive for maintenance and improvement. Homeownership is often considered the American dream; unfortunately, homeownership with little or no potential of appreciation is not the same thing.

C. Inclusionary Zoning is Costly to Administer and Police

As market-rate homes continue to appreciate, owners of price-controlled units have a tremendous incentive to get around their resale restrictions and sell for market rates. Unless local jurisdictions spend time and money monitoring units carefully, some may be sold or subleased at market prices. The Niguel Beach Terrace condominiums on the Dana Point Coast illustrate the problem. More than 200 units were sold at below-market rates with resale restrictions during the early 1980s. Just as the resale restrictions were about to expire in 2003, the California Coastal Commission issued 143 cease and desist orders (38 of which have been retracted) to owners thought to have either sold or rented out their units for market rates.⁴² Some owners reportedly have rented out their units for more than \$1,000 per week while they moved out-of-state. If the charges are accurate, more than 50 percent of the owners of subsidized units in this complex violated their resale restrictions.

Although some residents may have purposefully ignored their restrictions because of the huge potential gains, others tried to play by the rules but were frustrated by poor administration. Homeowners claim that administration of the ordinance was so poor that they could not find out which agencies to contact about selling or renting out their units, so they had no choice but to go out on their own. At least three different agencies have monitored the program since the condominiums were sold in the early eighties, and one admittedly had neither the staff nor the money to handle the program.⁴³ The current nonprofit managing the restrictions, Civic Center Barrio Housing Corporation, was reportedly notified that many of the units were being rented out improperly in the early nineties but did nothing.⁴⁴

The condominiums at Dana Point are not the only ones with a poor enforcement record. In one case in the city of Hollister, a real estate agent involved in a resale violating the price controls wrote the city about her seller's intent. The city never even responded. The city now admits that it received the letter but did not respond because it had no system in place to prevent owners from selling at market rates.⁴⁵

Programs that do monitor resale are often costly to administer. Running and monitoring the program in Palo Alto costs \$40,000 to \$60,000 in annual administration costs alone.⁴⁶ But in the previous 30 years only 152 for sale units and 101 rental units have been produced.⁴⁷ These administration costs of inclusionary zoning could have been passed on to housing consumers in the form of housing assistance. A report by Bay Area Economics notes:

In general, program managers characterized monitoring of inclusionary requirements as a challenging process. One Sunnyvale Housing Division staff person described the monitoring requirements as ‘time consuming’ and ‘cumbersome.’ Complications regularly arise from unit resales, owners renting out their units, and tenants and owners losing their qualifications as their incomes grow, among other issues.⁴⁸

The debate on inclusionary zoning often ignores the consequences of long-term price controls and the associated administrative costs. Advocates of inclusionary zoning leave out important details such as how the property will be maintained and whether long-term, in-kind subsidies are the best way to help those earning low income. Our evidence suggests that these problems and their costs are quite significant.

In addition, inclusionary zoning creates other administrative costs because the price-controlled units are far more difficult to sell than market-rate homes. One of the biggest challenges for builders of price-controlled units is qualifying buyers. Some builders estimate that the administrative cost of selling price-controlled homes is about double what is spent on market-rate homes. One builder describes the costs of qualifying buyers for a current development in Novato.

For the 40 buyers we have to date, we have processed over 270 applicants. The conversion ratio is so low that we are hiring additional staff to process the workload. The city also required us to have a custom software program developed to manage the list of applicants. The procedure is so complex that the software costs over \$400,000 to develop. This cost is for only 352 homes.⁴⁹

The process also takes time. The same builder says that at the Meadow Park development in Novato, “The process, as mandated by the city, is so cumbersome that we have only been able to sell 40 homes in 6 months. We started with over 2,600 prequalified buyers and have only been able to process 270 potential buyers netting 40 sales in 6 months. We literally can build the homes faster than we can process sales.” Both the direct administrative costs and the financing cost of carrying unsold inventory while searching for qualified buyers are additional administrative burdens created by inclusionary zoning ordinances.

Part 7

The Debate on Inclusionary Zoning

Many advocates of inclusionary zoning entirely ignore its economic consequences. A few advocates, however, at least try to take the economic problems into account. A handful of law reviews do attempt to defend inclusionary zoning on this front.⁵⁰ Some argue that inclusionary zoning may impose costs, but the costs will be offset, insignificant, or deserved. These authors conclude that inclusionary zoning may not harm the supply of housing as economists would predict. Some of the ideas contained in their articles have made it into the popular debate. This section examines and addresses some of the most often repeated arguments.⁵¹

A. How Effective are Density Bonuses?

Some advocates of inclusionary zoning argue that density bonuses—or giving builders the option to increase the density of their developments in return for making more of the units affordable—can offset costs, thus mitigating any potential price increases and leaving builders with the same incentive to supply homes. One actually claims that density bonuses can completely make up for the costs of inclusionary zoning: “High enough density bonuses create affordable units at no cost to landowners, developers, or other homeowners.”⁵²

The assertion that density bonuses offset costs associated with inclusionary zoning has several problems. First, as generally practiced in the Bay Area, inclusionary ordinances do not even offer density bonuses for meeting the ordinance’s requirements. These jurisdictions only offer density bonuses if developers exceed the ordinance’s requirements.

Even where density bonuses are made available, some of the most enthusiastic promoters of inclusionary zoning concede that they are not a panacea for addressing its substantial costs:

In many cases, developers do not seek to take advantage of density bonuses for a variety of reasons. First, some developers cannot use a density bonus because their project already has a high number of units per acre.... Second, a density bonus is not applicable to certain types of developments...because a density bonus...may not be economically beneficial. Third, many developers do not seek to increase the density of their developments to maintain a level of density they believe is critical for the marketing of their development. Fourth, in some instances, a higher density would require developers to change their buildings to a more expensive construction type, which can offset the per unit land cost savings. For example, if a higher density requires changing the construction of a building from a wood frame to a concrete and steel structure, per unit construction costs may rise significantly. Fifth, higher densities in

*many communities can be controversial. Some existing community members may protest a higher density development in their neighborhood.*⁵³

Yet another problem with density bonuses (and other oft-cited incentives such as development fee waivers) is the risk that they may trigger prevailing wage requirements under 2002 changes to California’s prevailing wage statutes. While to our knowledge neither the courts nor the Department of Industrial Relations has definitively resolved the matter, at least some local jurisdictions have raised the possibility that incentives offered to private developers for the construction of affordable housing may trigger prevailing wage requirements and thereby undermine the efficacy of the incentives:

*California State law intended as incentives for developers to create affordable housing are often ineffective due to competing laws with different priorities. Developers often find themselves in a position unable to take advantage of State Density Bonus law and local financing incentives (i.e., fee waivers and reductions) in order to construct affordable housing because State law also requires developers to pay prevailing wages to all subcontractors when they take advantage of these incentives. . . [P]revailing wage requirements...can add 20 to 30 percent in additional construction costs to a new housing project. Often, this deems the incentives cities can offer to induce developers to include an affordable housing component not much of [an] incentive after all.*⁵⁴

In sum, we believe that many advocates of inclusionary zoning have substantially overstated the potential of density bonuses and other incentives to mitigate the very significant costs associated with producing inclusionary units.

B. Inclusionary Zoning and Housing Costs

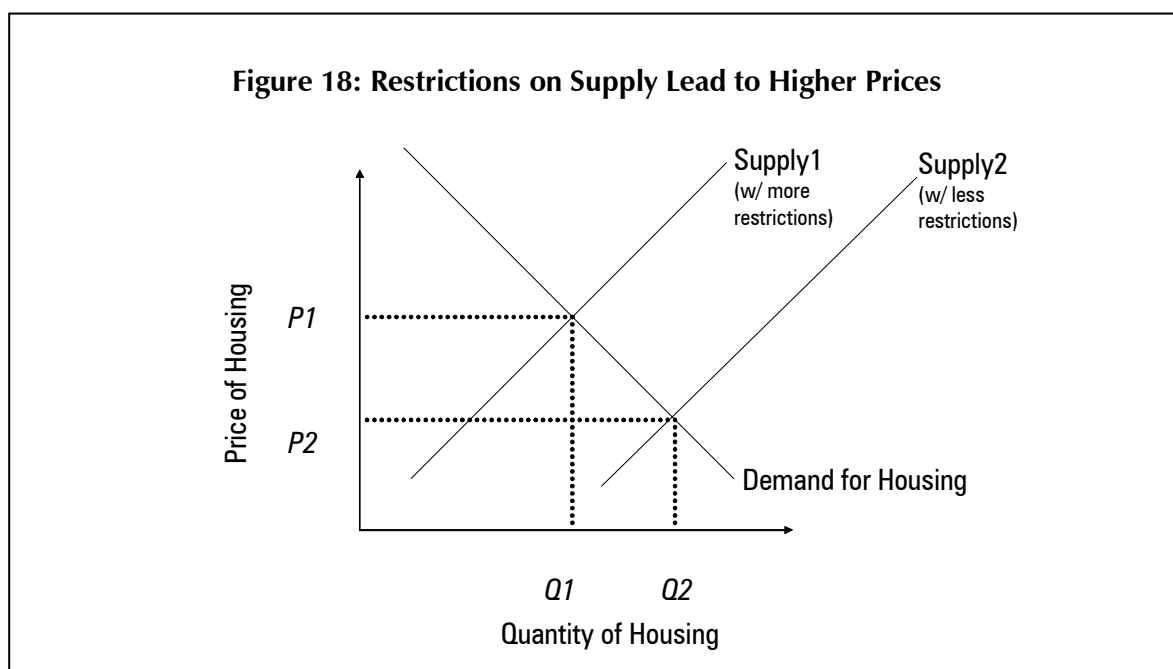
One of the most common errors made by advocates of price controls is asserting that the costs of inclusionary zoning are not reflected in higher prices for new homes. One leading advocate of inclusionary zoning argues that inclusionary zoning has no effect on housing prices even while acknowledging that it imposes significant costs on housing production. The claim is made that development costs have *no impact* on housing prices: “The price of housing is not a function of its development cost. Rather, housing price, be it rents or sale prices, are *solely* a function of market demand” (emphasis added).⁵⁵ Another writes:

*The short answer is that, while the costs may be shared among developers and landowners, the landowners likely suffer the most loss. Prospective homeowners are least likely to be affected, as their willingness to pay is what sets the market price, not the costs incurred by the developer.*⁵⁶

Thus, according to these arguments, landowners rather than new homebuyers bear the full burden of inclusionary zoning’s costs.

Although these arguments sound more sophisticated than those of advocates who ignore the economic issues completely, they are just as wrong. Economic principles teach that prices are determined by demand *and* supply and that cost increases most definitely impact both supply and price. Although two proponents are correct that developers cannot raise prices without constraint and that developers will charge as much as the market will bear, they misunderstand the simple fact that if costs increase for all builders due to an inclusionary requirement, the price that the market will bear will increase. Figure 18 shows that increased costs shift the supply curve up and to the left. As the supply curve is shifted, the new equilibrium will be on

a *different* point—at a lower quantity and a higher price—along the demand curve. This is textbook economics.



Furthermore, even if landowners bear most of the cost burden, inclusionary zoning still reduces the quantity supplied. As previously noted, imposing these costs on landowners simply lowers the value of the land for residential uses and creates an incentive to develop nonresidential uses—precisely the opposite incentive sought by those who want to increase the quantity of housing in California.

Others argue that the quantity of new construction will be the same even if builders have to absorb all of the costs. “Even if their profits are not maximized, developers will still realize acceptable profits. Therefore, developers will still develop.”⁵⁷ This assertion too misses another important economic principle. When businesses end up with less money from an endeavor, they will participate in the endeavor less. Construction is a competitive industry characterized by ease of entry and exit. When developing becomes unprofitable, would-be-developers simply take their resources elsewhere. If profits are abnormally low, builders do not passively respond and continue building at the same rate. They pack up their materials and build in another community where the returns are normal. If price controls were enacted over large geographic areas and builders could not move, people would simply invest less in developing and move to other regions. This phenomenon is currently visible as Bay Area homebuilders increasingly focus their activities on the Central Valley, the Sacramento area, and even Riverside County. With lower profit margins, less capital would flow into the building industry, making the equilibrium quantity go down. The resultant fewer homes translate into a lower quantity and a higher equilibrium price. Builders’ ability to withdraw from markets means costs will be passed on to landowners and market-rate buyers. In the extreme case in which builders could not pass on any costs, they simply would not build.

These arguments for inclusionary zoning also demonstrate a failure to understand another important aspect of homebuilding: Building is extremely risky. In California it can take years and millions of dollars in planning, environmental, and legal fees before a project receives the necessary governmental approvals. Even then, the entire investment can be lost if local voters reject the project in a referendum. As a result,

even during the best of markets, the approval process is fraught with risk. Thus, to suggest that developers will (or should) accept returns not commensurate with that risk ignores basic economics.

C. Socioeconomic Integration

Integrating different cultural, ethnic and income groups is often one motivation for creating inclusionary zoning laws. The science of economics evaluates the means of achieving different ends. It cannot say whether the ends themselves are desirable. In the case of inclusionary zoning for the purpose of socioeconomic integration, economics identifies what the costs of achieving this end are.

Inclusionary zoning's price controls raise the cost of market-priced homes, lower tax revenue to governments, and restrict the supply of new homes and perpetuate the loss by driving builders and middle-class buyers out of the market. All of these costs of inclusionary zoning documented above can be quite substantial.

Because inclusionary zoning discourages new construction and drives up housing prices, these ordinances actually make housing less affordable. Advocates of inclusionary zoning often claim their goals are both more affordable housing *and* socioeconomic integration. For example, one wrote, "Inclusionary housing should certainly be supported as a means not only of providing affordable housing, but also of furthering social and economic integration in traditionally segregated suburban areas."⁵⁸ But the two stated goals of inclusionary programs are contradictory. If inclusionary zoning is used for socioeconomic integration, the result will be less affordable housing. In other words, less affordable housing is the "price" a community pays for using inclusionary zoning to promote socioeconomic integration. And the resulting climate of inclusionary zoning, with less builders, less homes, and higher prices, forges a composition of very wealthy and subsidized poor with little middle class—a somewhat feudal-looking environment that minorities, unless they are wealthy or have won the "inclusionary zone lottery," cannot penetrate.

Economics does not pronounce judgment on the goal of socioeconomic integration, but it does point out that the costs of using inclusionary zoning to promote integration are quite high and their success is questionable. Economics also shows that those who wish to use inclusionary zoning to promote *both* socioeconomic integration *and* more affordable housing are bound to fail because the policy trades one of these values off at the expense of the other.

D. Increasing Supply is the Key to Housing Affordability

Many advocates of inclusionary zoning believe that the market is to blame for the housing affordability crisis. People hold this belief for two major reasons. First is the failure to understand what caused such high prices in the first place. Second is the belief that without restrictions on building, only mansions would be built and low-income households would not benefit.

Let us first deal with the cause of the affordability crisis with the Bay Area as the example. Many factors contribute to the high demand for housing in the Bay Area. But a large and more affluent population means large increases in demand for many goods and services. Prices of haircuts, meals, bicycles and movies have not increased nearly as much as home prices. These other goods have remained affordable because as demand for these other products increased, few regulations prevented suppliers from bringing more goods to

market. Market signals created by the increase in demand induced suppliers to provide more products or services. With more goods available, prices did not increase dramatically. The same market signals have not increased the quantity of housing supplied. Why not?

Housing prices in California, and in many urban areas, have skyrocketed but have not been met with the usual increase in supply. The reason is simple: housing regulations have prevented builders from building enough new homes to meet demand. A myriad of regulations, prohibitions, and questionable liability laws discourages, and often prevents, new home production. For example, state Environmental Quality Acts produce a number of problems because they give power to local government to lengthen processing time indefinitely; what previously took one year now can take ten. Regulations such as exclusionary zoning laws, moratoria on new construction, preservation ordinances, crippling workers' compensation regulations, environmental regulations, and legal processes that can delay development for years have all contributed to the high cost of housing. All of these regulations prevent increases in the quantity of housing supplied and drive up the price of housing.

A number of studies confirm that regulations are the cause of high prices. Edward Glaeser and Joseph Gyourko studied nationwide home prices and found that an "affordability crisis" only occurred in particular geographic areas that had restrictive land use regulations. The authors found that "Zoning and other land-use controls are...responsible for high prices where we see them."⁵⁹ Entitled land has such high prices because permits to build are so scarce. Glaeser and Gyourko's estimates indicate that only 10 percent of the gap between construction costs and home prices is caused by intrinsically high land prices; the other 90 percent is caused by zoning and land-use regulations. They conclude:

*If policy advocates are interested in reducing housing costs, they would do well to start with zoning reform. Building small numbers of subsidized housing units is likely to have a trivial impact on average housing prices, even if well-targeted toward deserving poor households. However, reducing the implied zoning tax on new construction could well have a massive impact on housing prices.*⁶⁰

Other studies have similar findings. A study by University of California at Berkeley economists on land use regulation's effect on housing prices found that until 1970 California housing had been in line with the national average of housing prices, but by 1980 California housing prices more than doubled the national average. They determine that one major cause of the price increase is "a massive increase in the use of land-use and growth management techniques to slow and stop new housing production."⁶¹ In a study of housing costs throughout the United States, one economist concludes, "One thing is obvious: Stringent housing regulations have certainly not helped the San Francisco area solve its housing problems. They may even be creating the problems."⁶²

Another study with a different methodology reached similar conclusions. It constructed an index of seven different land-use regulatory variables and ranked 56 different metropolitan areas according to how strictly land use was regulated.⁶³ Regulatory variables included measures such as changes in length of approval time, time required to get land rezoned, amount of acreage zoned for residential development, and percent of zoning changes approved. It found that a change from a lightly regulated environment to a heavily regulated one decreased the number of permits to build by 42 percent and increased home prices by 51 percent. Homeownership rates also declined about 10 percent. Evidence shows that areas with high levels of regulation have higher housing prices, higher rents, and lower homeownership rates.

Price controls are perhaps the worst “solution” to a housing affordability problem caused by prior restrictions on housing. The real solution is to encourage the issuance of building permits, open more land for responsible development, and abolish zoning laws that unduly restrict development. If government reduced and eliminated regulations that slow and prevent housing development, the housing market could respond to increased demand just like other industries in California.

Some advocates of inclusionary zoning recognize the problems caused by prior regulations but still recommend inclusionary zoning. One admits that, “To a large extent, it is not the presence, but the absence, of a free market in housing that has helped create a shortage of affordable homes for many Americans.”⁶⁴ Yet he still favors price controls because he believes that even if the supply of new homes is increased, only high-priced new construction will be built and affordability will not be improved. But inclusionary zoning advocates misunderstand the basic principle that all new housing helps keep prices down. A sample ordinance prepared by the *Institute for Local Self Government* states that inclusionary zoning helps, “Offset the demand on housing that is created by new development.” These authors appear to believe that producing new housing actually hurts low-income households.

Contrary to misconceptions, when market-rate housing is built, all income groups benefit. When a household moves into new market-rate construction, a household with lower income typically purchases its existing house. The concept is sometimes referred to as “filtering” because as families upgrade their homes, their old homes filter down to people who could not afford them before. Another way of thinking about it is that in a sense the housing market can be seen as a ladder, with affordable homes mainly older homes on the bottom rung, and people trading up homes and climbing the ladder as their fortunes rise.⁶⁵ Perhaps a better word or better analogy is needed, but the process works. A classic study, *New Homes and Poor People* by Lansing *et al.*, examined the chain of existing home sales in 13 cities and found that each new home generated an average of 3.5 moves.⁶⁶ All those moves increase the available supply and lower the price of existing homes, which makes them more affordable to low-income buyers. The study reports that 9 to 14 percent of all people who moved in the chain of upgrades generated by a new home were low-income. The effect on moderate-income families is even stronger. In moves after the first new construction move, people of moderate income made up 30 percent of movers. Lansing *et al.* conclude, “Any policy which increases the total supply of housing will be beneficial. The working of the market for housing is such that the poor will benefit from any actions which increase the supply in the total market.”⁶⁷

Some assert that filtering does not take place when more people are moving into the area. One writes, “Whenever the number of persons interposed between the original buyers and the target population increases, filtering slows. In the 1970s and 1980s a surge in the number of younger adults at middle-incomes all but eliminated filtering to the poor.”⁶⁸ Although he is right that when more people move into an area they will jump in on the chain of moves, that does not mean that the new construction did not help to keep home prices affordable. The relevant question that must be asked is what would have happened to prices if the new construction had not been built. If no new construction is built and more people move into an area, they start bidding against existing residents and drive the price of even low-quality homes higher. In contrast, if the number of newly constructed homes equals the number of new residents, prices will remain stable. One way to analyze whether arguments against high-priced new construction makes sense is to ask whether destruction of existing high-priced homes would help low-income families.

A 2002 study by two Berkeley professors and one analyst with the Public Policy Institute of California, states the problem quite simply: “supply matters.”⁶⁹ They find that the more responsive the permitting

process (and hence home-building) is to increases in employment, the lower the median price of housing and the higher the homeownership rates.

Inclusionary zoning does not correct the problems caused by exclusionary zoning; instead it exacerbates them. Inclusionary zoning imposes significant costs on the housing industry, and density bonuses plus other incentives do little to offset costs. Inclusionary zoning is like a tax on new homes, and, like all taxation, builders will not simply absorb the tax and provide the same number of homes at the same prices. The driving force behind California's housing affordability crisis is restrictions on supply. The State of California's Little Hoover Commission recommends, "To increase the supply of affordable housing, communities need to zone more land for housing, increase general plan and zoning densities to allow for higher density residential development and rethink other standards."⁷⁰

Part 8

Conclusion

Inclusionary zoning should only be enacted if the goal is to make housing more expensive and decrease the quantity of new housing. Such policies hurt homebuyers and will price out most low-income families. Despite the good intentions of those who support inclusionary zoning, economics tell us that price controls on new housing will have the unintended consequence of reducing the quantity of new homes built. Rather than helping, inclusionary zoning will actually make the affordability problem worse. We have shown that inclusionary zoning imposes significant costs on the housing sector. Those costs are passed on to landowners and buyers of market-rate homes. Higher housing prices will result.

We agree that something should be done about the affordability crisis, but price controls are not the answer and may be the problem. Bay Area cities will never be able to rely on inclusionary zoning to meet their housing needs. In fact, inclusionary zoning has led to a decrease in housing production. After 30 years of feeble performance, the costs of inclusionary zoning are only beginning to be seen. Rather than continuing to impose these policies, jurisdictions would do well to eliminate them. By phasing out resale restrictions on existing units, the “owners” of government-controlled units would gain the true benefits of homeownership. And by ending price controls on new construction, builders would have an incentive to supply more housing. The worst possible solution to the affordability crisis is to pass policies that result in restricting the supply of housing. Inclusionary zoning is one such policy.

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Powell and Stringham's other recent work on housing includes a policy study, "Estimating the Effects of Price Controls in the Redevelopment of the Fort Ord Military Base" and testimony before the Board of the Fort Ord Reuse Authority. Powell and Stringham also have the entry on "Housing" in the forthcoming *Concise Encyclopedia of Economics*.

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Related Reason Foundation Studies

Smart Growth in Action, Part 2: Case Studies in Housing Capacity and Development from Ventura County, California, by William Fulton, Susan Weaver, Geoffrey F. Segal, and Lily Okamura, Reason Foundation Policy Study No. 311, May 2003, <http://www.rppi.org/ps311.pdf>

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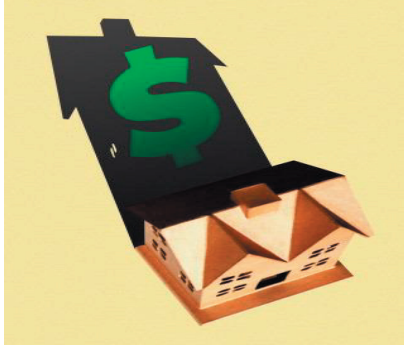
Endnotes

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- ¹ The median city is the one where there are an equal number of cities above and below it when ranked by housing price effects.
 - ² See the statements of the housing advocacy coalition National Housing Conference at www.nhc.org
 - ³ National Housing Conference, *Inclusionary Zoning: The California Experience*, (Washington, D.C.: National Housing Conference), 2004, <http://www.nhc.org/nhcimages/California%20IZ/CaIZ04.pdf>.
 - ⁴ Erin Riches, *Locked Out 2004: California's Affordable Housing Crisis* (Sacramento, California: California Budget Project, 2004), p.13.
 - ⁵ California Coalition for Rural Housing and Non-Profit Housing Association of Northern California (2003). *Inclusionary Housing in California: 30 Years of Innovation*, p.3.
 - ⁶ Other studies that look at cities alone count the number to be 101 in the Bay Area. Bay Area Council (2003) *Bay Area Housing Profile: A Report Card on the Supply and Demand Crisis*, Bay Area Council: (San Francisco, CA, 2003), p.8.
 - ⁷ Riches, *Locked Out 2004*, p.13.
 - ⁸ Bay Area Council, *Bay Area Housing Profile*, p.8.
 - ⁹ Ibid. p.8.
 - ¹⁰ National Association of Homebuilders, *Housing Opportunity Index: First Quarter* (Washington, D.C.: National Association of Homebuilders, 2002).
 - ¹¹ *Inclusionary Housing in California: 30 Years of Innovation*, pp.31-35 lists three counties (excluding San Francisco, which is its own county) in the Bay Area that have inclusionary zoning. According to its table, 756 units have been produced in Contra Costa County, 124 units in San Mateo County, and none in Napa County. Because it is unclear if city and county governments double counted these 880 units, we exclude these countywide figures from our sample. If these units are indeed separate, then we underestimate the number of units by 11 percent and later underestimate the costs of inclusionary zoning by a comparable figure.
 - ¹² Association of Bay Area Governments, *Regional Housing Needs Determination for the San Francisco Bay Area in 2001-2006 Housing Element Cycle* (Oakland, California: Association of Bay Area Governments, 2001).
 - ¹³ Consider the reaction of one developer in Windsor, California. Orrin Thiessen, the architect and developer behind downtown Windsor's transformation, said if he is required to build affordable units along with his market-rate town houses, it could put him out of business. "That'll kill some of my projects," he said. "I'm buying land at very high prices and building very expensive buildings on top of it. It's pretty simple from my perspective. It just doesn't pencil out." Clark Mason, "Windsor may bend rules for developer." *Press Democrat*, October 17, 2003, pp. 2-3.
 - ¹⁴ William Tucker, *Zoning, Rent Control, and Affordable Housing*, (Washington, D.C.: Cato Institute, 1990).
 - ¹⁵ Michael Stoll, "Mission Bay Takes Shape," *San Francisco Examiner*, September 13, 2002.
 - ¹⁶ We are not measuring what economists refer to as social costs, which would include the value of the lost consumer and producer surplus associated with inclusionary zoning. We are simply estimating the monetary amount that a seller must forgo when selling at the restricted price.

- ¹⁷ Some cities, including Tiburon, define “Moderate” income as 80 percent of median. Thus, when surveys say they target “Low” and “Moderate” income, in fact they are targeting “Very Low” and “Low” incomes. (See Tiburon Ordinance Subchapter 6: Inclusionary Zoning.)
- ¹⁸ Income categories are adjusted by household size. Compared to a four-member household, a household with five members can have an 8 percent greater income, a household with six members a 16 percent greater income, etc. Households with three members will have a 10 percent lower income, two members 20 percent lower and one member 30 percent lower according to the Department of Housing and Community Development. Because the four-member household is the baseline, we focus on four-member households throughout the paper.
- ¹⁹ Barbara Kautz, “In Defense of Inclusionary Zoning: Successfully Creating Affordable Housing” *University of San Francisco Law Review*, vol. 36, 2002, p. 1014, gives an additional legal reason: “An inclusionary ordinance that does not limit the resale prices of for-sale units (creating ‘premium pricing’ for the first buyer) may be vulnerable to attack for ‘not advancing a legitimate state interest.’”
- ²⁰ Phone interview, March 3, 2004.
- ²¹ Personal correspondence, March 3, 2004.
- ²² For example, inclusionary zoning in Pleasant Hill requires 5-25 percent of units be affordable, and its target groups are “Very Low” and “Low.” In this case we would assume only 5 percent needed to be affordable and the share was split 2.5 percent for “Very Low” and 2.5 percent for “Low.” Because data for specific requirements of each city are currently unavailable, we decided to make simplifying assumptions and again err on the side of lower costs of inclusionary zoning.
- ²³ We estimate market price by city by comparing 2003 data of the average price of new homes by county compiled by First American Real Estate Solutions and 2000 Census median price of existing homes by city. Because new homes in the Bay Area sell for more than the 2000 median price of existing homes, and because new home price data by city is difficult to assemble, we adjust the 2000 Census city data based on each county’s price differential for new homes. In Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma the ratio of the price of new homes to the price of existing homes is 1.8, 2.0, 1.4, 2.2, 1.2, 1.6, 1.5, 2.3, and 1.3 respectively. For example, the 2000 Census median price of existing homes in the city of Sonoma was \$305,100, so we multiply that by 1.3 to estimate that a new home would be sold for closer to \$400,000.
- ²⁴ Data on each city’s specific formulas and specific price controls are currently unavailable, so we make standard assumptions about target income groups.
- ²⁵ The figure looks at costs in today’s prices. The divergence between current price controls and the price at which the units currently could sell gives us comparable numbers in today’s dollars. It does not calculate the home price for the year the price-controlled units were built or calculate the price controls in that year.
- Donna Jones, “Homes, Good and Cheap: Low-income Buyers Get High-Quality Homes,” *Santa Cruz Sentinel*, January 10, 2004, p.9. reports on one project built in 1998 that helps illustrate our assumptions. When homes were first sold, government set the prices at around \$160,000. Today government sets their prices at \$280,000, and “they would be worth at least \$800,000 on the open market.” For the purposes of our calculations, we would subtract the restricted price of \$280,000 from the market price of \$800,000 to arrive at the \$520,000 difference. That price control (and that difference divergence between the market price and the restricted price) is no longer imposed on the initial seller but is now imposed on the current owner. If 10 homes were in a project, the equivalent cost from the price controls would be 10 times that number.
- ²⁶ The requirement of subsidized housing has the same effect as a development tax. The developer makes zero economic profit with or without inclusionary zoning, so the implicit tax is passed on to consumers (housing price increases) and landowners (the price of vacant land decreases). In other words, housing consumers and landowners pay for inclusionary zoning.” Robert Burchel and Catherine Galley,

- “Inclusionary Zoning: Pros and Cons,” in *The California Inclusionary Housing Reader*, (Sacramento: Institute for Local Government, 2003), p.29.
- ²⁷ California Department of Housing and Community Development letter to the city of Fairfield, July 16, 1996.
- ²⁸ California Department of Housing and Community Development letter to the city of Fairfield, April 26, 2001.
- ²⁹ Laura Padilla, “Reflections on Inclusionary Housing and a Renewed Look at its Viability” *Hofstra Law Review*, Vol. 23, 1995, p.576.
- ³⁰ Joel Kotkin and Thomas Tseng, *Rewarding Ambition: Latinos, Housing, and the Future of California* (Malibu: Pepperdine University School of Public Policy, 2002).
- ³¹ Howard Hussock, *Repairing The Ladder: Toward a New Housing Policy Paradigm*, Reason Foundation Policy Study No. 207, (Los Angeles: Reason Foundation), July 1996.
- ³² Our data is from 1970 to 2002, so we have data for seven years prior and seven years following for 33 cities that created their ordinances between 1977 and 1995.
- ³³ Andrew G. Dieterich, "An Egalitarian Market: The Economics of Inclusionary Zoning Reclaimed" *Fordham Urban Law Journal*, vol. 24 (1996) p. 41.
- ³⁴ Several studies emphasize the assertion that there is not direct cost. See Kautz, “In Defense of Inclusionary Zoning,” p.5; Robert Burchel and Catherine Galley, “Inclusionary Zoning: Pros and Cons,” in *The California Inclusionary Housing Reader* (Sacramento: Institute for Local Government, 2003), p.29; and Marc Smith, et.al., “Inclusionary Housing Programs: Issues and Outcomes,” *Real Estate Law Journal*, Fall 1996.
- ³⁵ We assume a 3 percent discount rate and that price controls will be in place for 47 years, the median length that Bay Area cities intend to impose them.
- ³⁶ Many wealthy, aged individuals have low income because they are retired, but they own their homes and have low expenses. Aggregate “Housing Needs Assessments” about income and housing affordability would mistakenly classify them in the category of low-income families in need of a home, e.g. *City of Salinas Inclusionary Housing Program Feasibility Study* (Berkeley, California: Bay Area Economics, 2003) p.i.
- ³⁷ Michael Rawson, et al., *Inclusionary Zoning: Policy Considerations and Best Practices* (Sacramento, California: California Affordable Housing Law Project of the Public Interest Law Project, 2002).
- ³⁸ Brian Joseph, “Palm Springs resale restriction pinches residents,” *The Desert Sun*, June 23, 2003.
- ³⁹ Monterey Staff Report “How Did We Do? 17 Recommendations for the Monterey County Inclusionary Program,” in *The California Inclusionary Housing Reader*, (Sacramento: Institute for Local Government, 2003), p.63.
- ⁴⁰ Ibid, p. 64.
- ⁴¹ Dean Paton, “The equity debate,” *The Pinnacle*, Vol 17, No 52, September 25, 2003.
- ⁴² Dan Weikel, “Coast Homes Battle Grows” *LA Times*, December 1, 2003.
- ⁴³ Ibid.
- ⁴⁴ Ibid.
- ⁴⁵ Paton, “The equity debate,” Vol. 17, No. 52, September 25, 2003.
- ⁴⁶ Bay Area Economics, “The Bay Area Case Studies, Report to the City of San Jose,” 53-62, *The California Inclusionary Housing Reader* (Sacramento: Institute for Local Government, 2003), p.56.

- ⁴⁷ Ibid, p.55
- ⁴⁸ Ibid, p.60.
- ⁴⁹ Personal correspondence March 3, 2004.
- ⁵⁰ Padilla, "Reflections on Inclusionary Housing," Dieterich, "An Egalitarian Market," and Kautz, "In Defense of Inclusionary Zoning."
- ⁵¹ Dieterich, "An Egalitarian Market," particularly deserves a more thorough point-by-point critique, which is beyond the scope of this study. Here we comment on a few of the popular and often repeated errors in his study.
- ⁵² Kautz, "In Defense of Inclusionary Zoning," p.1019.
- ⁵³ David Paul Rosen, *Inclusionary Housing Implementation Policies, Practices, and Program Administration* (Prepared for City of Los Angeles, 2003), p.45.
- ⁵⁴ City of Pittsburg (2004), *Housing Element*, HCD Revision Draft, p.13-87.
- ⁵⁵ David Paul Rosen, "Inclusionary Housing and Its Impact on Housing and Land Markets." *NCH Affordable Housing Policy Review*, Vo.3 No.1 Feb. 2004 p.42.
- ⁵⁶ Darin Smith, quoted in Kautz, "In Defense of Inclusionary Zoning," p.96.
- ⁵⁷ Padilla, "Reflections on Inclusionary Housing and a Renewed Look at its Viability," *Hofstra Law Review*, p.576. Furthermore, she writes, "Even if not 100% compensated, any remaining costs would simply be absorbed as a cost of doing business" p.577.
- ⁵⁸ Ibid, p.567.
- ⁵⁹ Edward Glaeser, and Joseph Gyourko, "Zoning's Steep Price" *Regulation*, Volume 25 Number 3, Fall 2002, p. 7.
- ⁶⁰ Ibid.
- ⁶¹ Lawrence Katz and Kenneth Rosen, *The Effects of Land-Use Controls on Housing Prices* (Berkeley, California: Institute of Business and Economic Research, 1980).
- ⁶² Tucker, *Zoning, Rent Control, and Affordable Housing*.
- ⁶³ Stephen Malpezzi, "Housing Prices, Externalities, and Regulation in U.S. Metropolitan Areas." *Journal of Housing Research* (Vol. 7, No. 2, 1996), pp. 209-241.
- ⁶⁴ Dieterich, "An Egalitarian Market: The Economics of Inclusionary Zoning Reclaimed," p.47.
- ⁶⁵ See Howard Hussock, *Repairing The Ladder: Toward a New Housing Policy Paradigm*, Reason Foundation Policy Study No. 207, (Los Angeles: Reason Foundation), July 1996.
- ⁶⁶ John Lansing, Charles Clifton, and James Morgan, *New Homes and Poor People* (Ann Arbor, Michigan: Institute for Social Research, 1969).
- ⁶⁷ Ibid, p. 68.
- ⁶⁸ Dieterich, "An Egalitarian Market," p.97
- ⁶⁹ John Landis, Elmer John, Vicki and Matthew Zook, "New Economy Housing Markets: Fast and Furious-But different?" *Housing Policy Debate*, Vol. 13 No. 2, 2002, pp.233-274.
- ⁷⁰ Little Hoover Commission, *Rebuilding The Dream: Solving California's Affordable Housing Crisis* (Sacramento, California: Little Hoover Commission, 2002), p.26



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